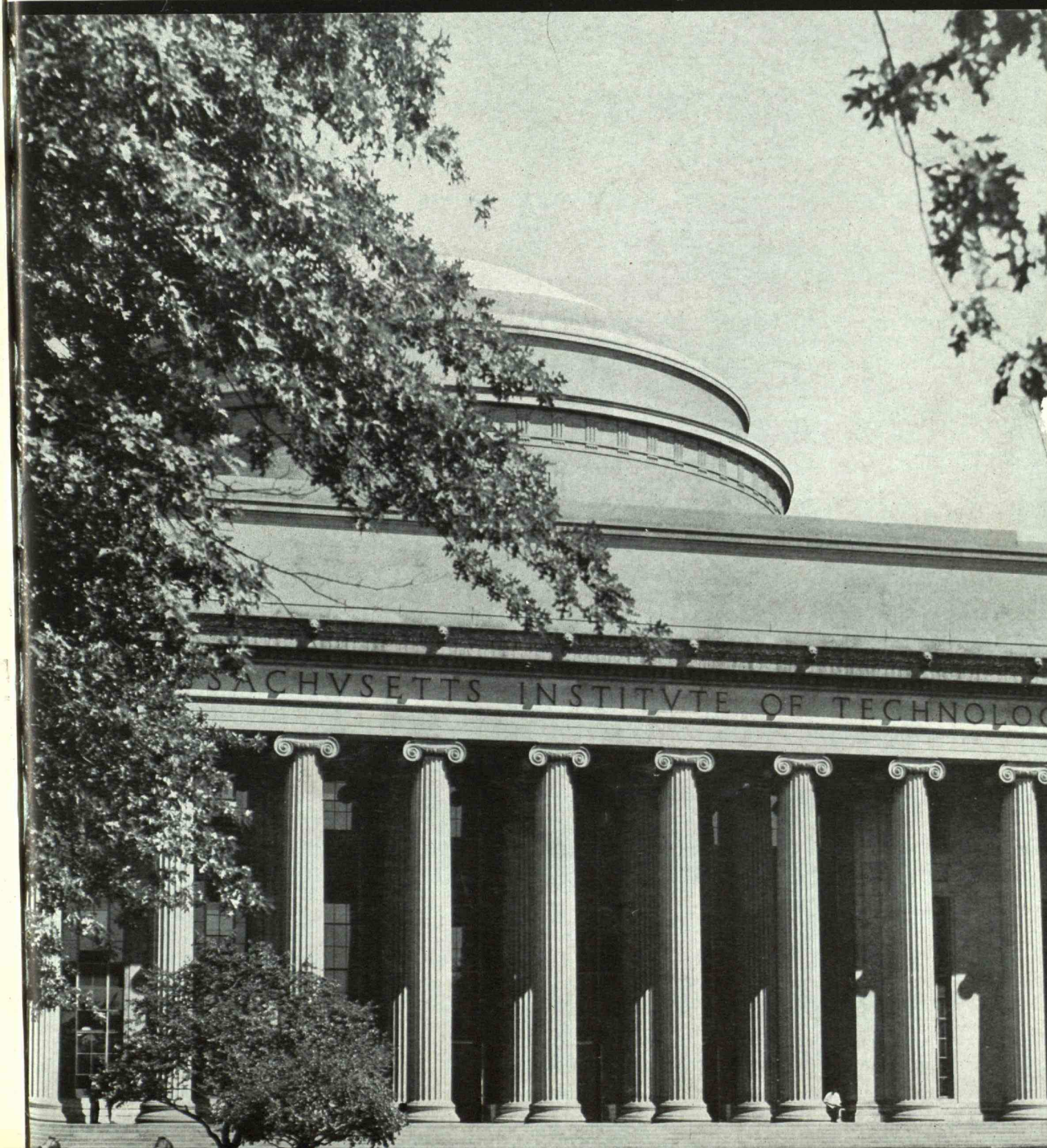


# TECHNOLOGY

REVIEW *November 1948*

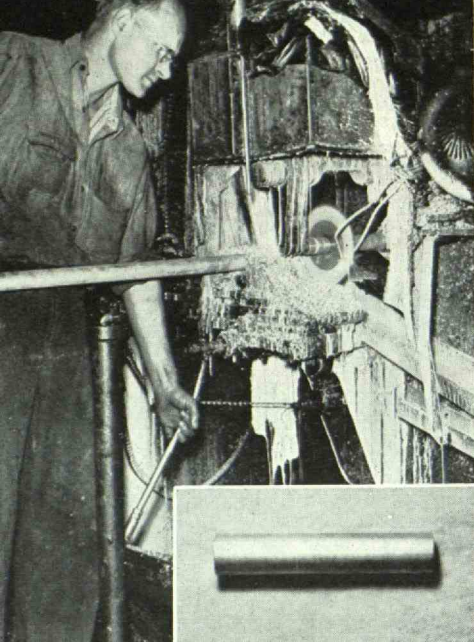


# technology review

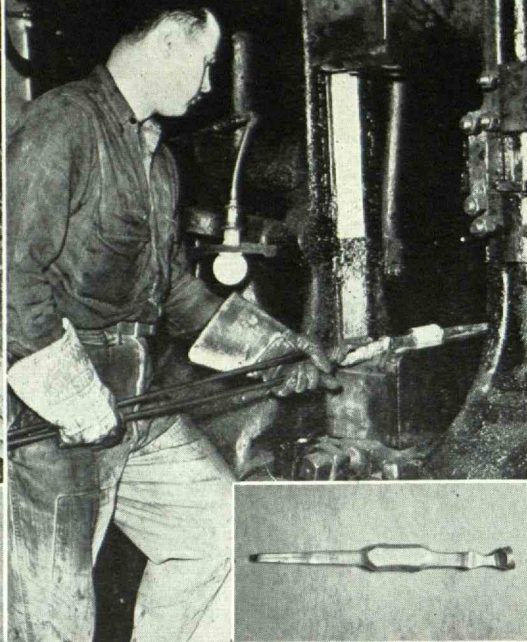
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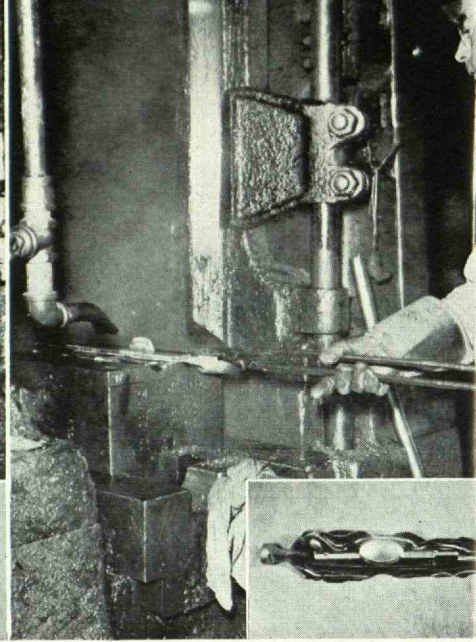




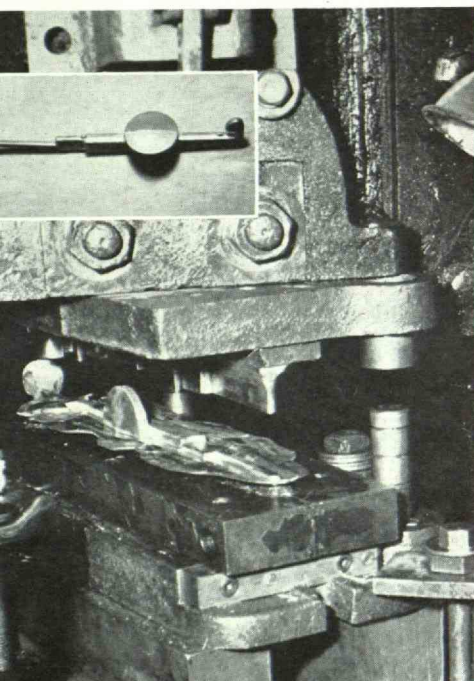
Cutting Bar



Lengthening and Shaping



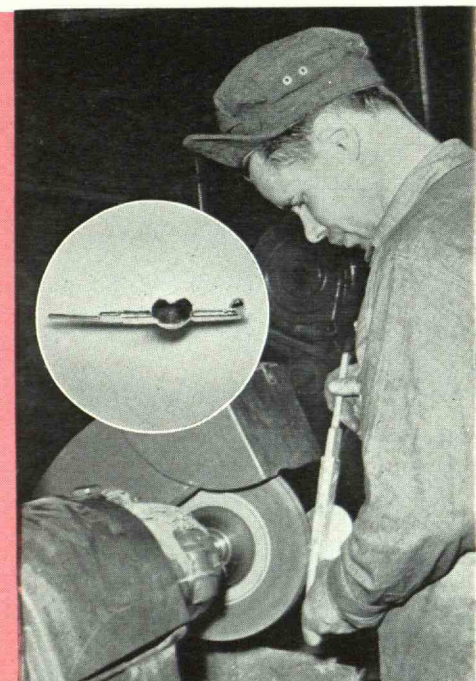
Shaping to the Die



Trimming the Flash

# FORGING ALUMINUM

into  
Pressure Cooker Tops



Finishing and Polishing

# The *HARVEY* Metal Corporation

HAROLD B. HARVEY '05

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FORGINGS IN ALUMINUM — BRASS — BRONZE — COPPER — MAGNESIUM — MONEL — ALLOYS

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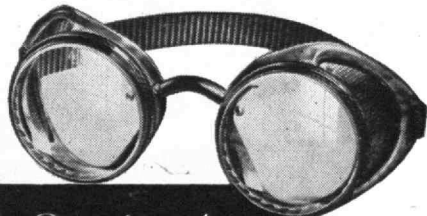
**Industrial  
Eye Accident Costs  
UP 78%**  
Since 1939

## Make this Expense No. 1 on your List to Lower in these days of Higher Costs!

Until conditions change, you may have to "go along" in paying MORE for the NECESSARY raw materials to stoke your production, but eye accidents on the job represent a cost *you can control* — NOW! And they're very much worth controlling . . . one firm employing over 1200 workers spent \$4,262 in 1946 for eye accidents as against \$204.59 in 1947 when an eye protection program was put in operation.

How about *your* plant? You may

be amazed at what the direct and *hidden* costs of industrial eye accidents can total and how economically these costs can be cut by an adequate program of control. Ask your nearest AO Safety Representative.



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## designed and built to **OUTPERFORM**

Just out of the testing laboratories this television receiver, National's latest engineering triumph, incorporates 11 outstanding design features. Pictures are brighter, steadier, clearer — Dual-speaker FM sound is amazingly realistic. Built with world-renowned National craftsmanship and quality components, National Television operates perfectly, dependably — *every* time you turn it on! Automatic station selector makes accurate tuning easy. Covers all 13 channels. 21 tubes (including 3 rectifier tubes) plus 7" picture tube.



Also available in handsome mahogany cabinet. Model TV-7W

**\$199.50** complete

### **BRIGHTER**

- Full 4,000 volts on the picture tube.
- Coil switching assures equivalent of separate, high-Q tuned circuits for each channel to improve sensitivity, stability.
- Automatic Gain Control — like AVC in your radio — corrects for variations in signal strength.

### **STEADIER**

- Extra-stable synchronizing circuit locks picture in place. No need for constant re-tuning. Just set controls once and relax!

### **CLEARER**

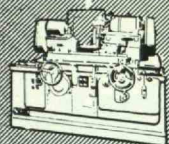
- Uses 37 mc IF instead of conventional 21 mc — minimizing picture interference caused by other radio services.
- Specially designed, double-tuned RF bandpass circuits improve selectivity and image ratio.
- Fine tuning adjustment provided.
- Two speakers and hum-free power supply provide clearer, life-like binaural sound.

**SEE AND HEAR  
THE DIFFERENCE!**

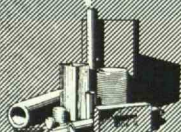




GRINDING WHEELS



GRINDING MACHINES



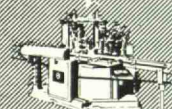
REFRACTORIES



MORBIDE



NON-SLIP FLOORS



LABELING MACHINES

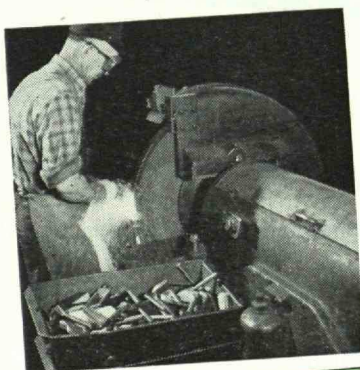


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AND CLOTH...  
SHARPENING STONES



## EVEN YOUR GOLF DEPENDS ON ABRASIVES...

**P**RECISION in your golf game demands precision in your clubs. And Norton abrasives help make that precision. The forgings for your "irons" are rough ground as illustrated and then the club faces are precision finished on disc grinders. The hosel for the shaft is centerless ground and then the whole club head receives several polishing operations with succeeding finer sizes of ALUNDUM abrasive. And in the sanding operations on your "woods" the products of the Norton Behr-Manning Division are widely used.



Yes, abrasives are important to you for they had a part in producing about every product you use — from the alarm clock that wakes you in the morning to the refrigerator that furnishes your midnight snack. And wherever abrasives are used you'll find Norton — for Norton is the world's largest producer of abrasives and grinding wheels.

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(Behr-Manning, Troy, N. Y. is a Norton Division)



# NEW PROCESS

*reduces cost of*

## ETHYLENE PRODUCTION

PROCESS Developed and Licensed

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PLANTS Engineered and Constructed

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**THERMOFOR PYROLYTIC CRACKING  
PROCESS...**

- ... a high temperature thermal cracking process, by which ethylene and aromatic hydrocarbons are economically obtained in quantity from low-grade petroleum oils and light hydrocarbons.
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- ... employs a moving bed of solids as a heat transfer medium capable of withstanding extremely high temperatures and rapid cooling.
- ... features a self-cleaning arrangement whereby the carbon deposits are utilized to generate heat required in the operation.

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*Carbon Black*

*Natural Gas*

*Natural Gasoline*

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*Pine Tar*

*Charcoal*



Cabot raw materials meet a remarkably diversified list of industrial needs.

The Cabot Companies are among the world's leading producers of carbon black for rubber, ink, paint, varnish, lacquer, plastics and other products requiring this remarkable pigment.

The pine distillates of Retort Chemical Division have wide spread application in rubber, ships' coatings, paper, heat quenching oil for steel and cast iron, and in stains.

Cabot raw materials reach these and other varied destinations along a route which begins at research and development, and continues through production control to the manufacturer who uses Cabot raw materials.

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No. 10: THE AIRCRAFT INDUSTRY



*Lift up your eyes... AGAIN!*

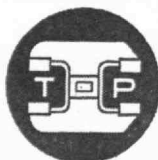
Today, strange new silhouettes streak across the sky at speeds which strain the eye. American airpower is on the wing again.

And as it always has been—since the days of Loughheed, Lindbergh, and Byrd—the Taft-Peirce Contract Manufacturing Division is a fully alerted “ground force” for the aviation industry, up to the minute in know-how and equipment.

Manufacturers of aircraft, engines, or any component from hydraulic control valves to micro-

precision engine parts, will find that T-P engineers talk their language straight through from blueprint, to toolroom, to production line. And whatever *you* need—from a single tool or part to complete mechanisms in continuous quantities—you can get it on schedule from this unique organization in its modern, flexible plant. Get the full picture from the famous illustrated book: “Take It To Taft-Peirce.” Write to The Taft-Peirce Mfg. Co., Woonsocket, R. I.

For Engineering, Tooling,  
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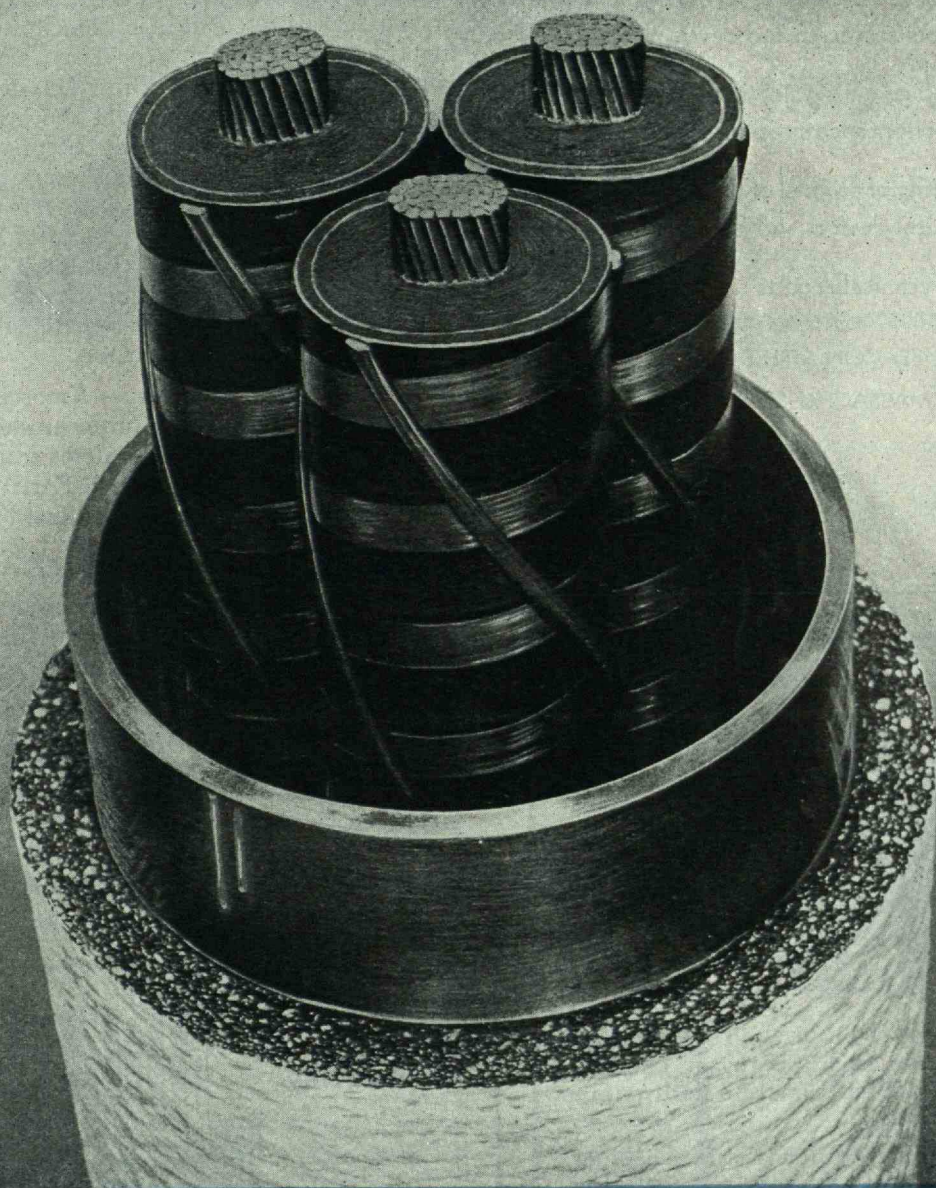
**TAKE IT TO TAFT-PEIRCE**



# Outstanding Development...

138,000 Volt Habirlene Sheathed Compression Cable pioneered by

**PHELPS DODGE COPPER PRODUCTS CORPORATION**



## ADVANTAGES

1. Greatest Reliability.
2. Simplified Installation.
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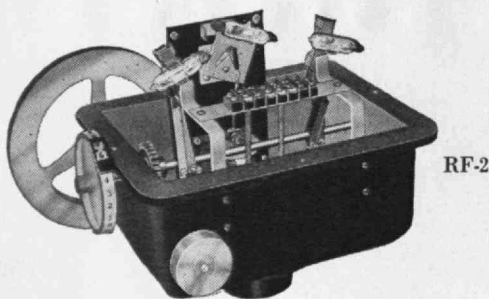
11 BEACON STREET

BOSTON 8, MASSACHUSETTS, U. S. A.

Telephone: CApitol 7-6990

"Cable Address MARHUB-Boston"

### Put that *Second Pump* to Work!



A 2-PUMP RF-2 ROTO-TROL with a built-in alternator will operate each pump on alternate starting cycles and will still operate both pumps if the demand requires.

This Roto-Trol is furnished in a Cast Iron cabinet. It is float operated through stainless steel tape. Also available in from two to eight circuits for sequence control.

DEPTH INDICATOR IS  
OPTIONAL — EXTRA

*Write for full Data*

Water Level Controls Division of

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711 HAMPDEN AVE., ST. PAUL 4, MINN.

## THE TABULAR VIEW

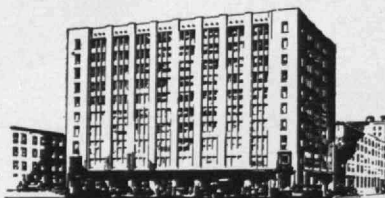
**Technical Volumes.** — Many readers of *The Review*, who recall the late Dean Henry P. Talbot, '85, would have warmed to the reference made to him in a talk before the European graduate students in the Foreign Student Summer Project last June by JAMES S. THOMPSON, author of "Technical Publishing Today" (page 31). Mr. Thompson stated then that literally his first contact with technical authors, just after graduating from the University of Wisconsin in 1910 and joining the then infant McGraw-Hill organization, resulted in such kindly treatment and inspiring suggestions as to start a plan which culminated in the development of an international series of books in chemistry that now totals nearly 100 volumes. Currently, having resigned, at the end of 1946, from the presidency of the McGraw-Hill Book Company, Mr. Thompson is devoting his time to the broader aspects of author relationships and international contacts with editors, publishers, and educators.

**International Relations.** — A most interesting and unusual opportunity for 62 European students to study at M.I.T. during the summer stems from the Foreign Student Summer Project, which Earl W. Eames, Jr., a senior in Courses X and XV, initiated and for which he has served as chairman. DONALD J. EBERLY, a junior student in the Department of Physics, has been identified with the Foreign Student Summer Project and has handled its publicity since the first. Mr. Eberly tells of "A New Experiment in International Relations" beginning on page 34.

**M.I.T. Expands.** — The growth of the Institute, from its beginning in Cambridge in 1916 to the present time, makes an impressive story, second only to the prospects which the new era for the Institute holds. "Recent Additions to M.I.T. Building Facilities" (page 21) is the product of co-operative efforts of *The Review's* editorial staff.

### Speed with Economy

R. C. Williams & Co.



Current business trends give no reason to anticipate lower costs for the construction of industrial buildings during the next two years. So if you need a new factory, why wait?

The profit you will make on goods produced in the new factory may far exceed any saving you might make by waiting for lower costs.

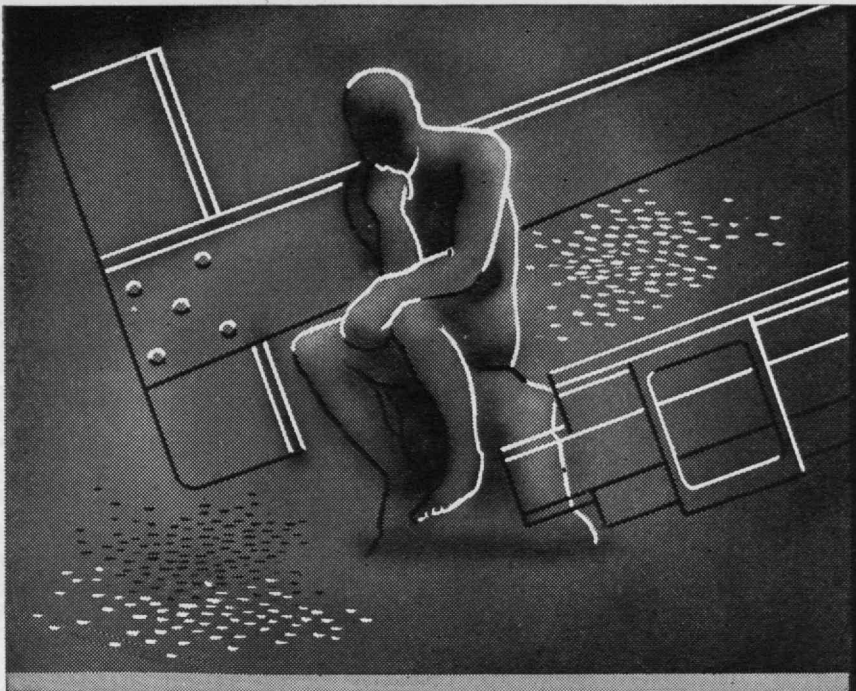
**W. J. BARNEY CORPORATION**

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101 PARK AVENUE, NEW YORK

**INDUSTRIAL CONSTRUCTION**

Alfred T. Glassett, '20, Vice President



## Thinking of improving

"Improving" any machine really means increasing its productive capacity. That means tinkering with speeds and weights and strength—ending up with alloy steels.

Which alloy steel?—the one that meets physical requirements at the lowest cost. Molybdenum steels fill that bill. Good hardenability, plus freedom from temper brittleness, plus reasonable price enable them to do it.

Send for our comprehensive 400-page book, free; "MOLYBDENUM: STEELS, IRONS, ALLOYS."

CLIMAX FURNISHES AUTHORITATIVE ENGINEERING DATA ON MOLYBDENUM APPLICATIONS

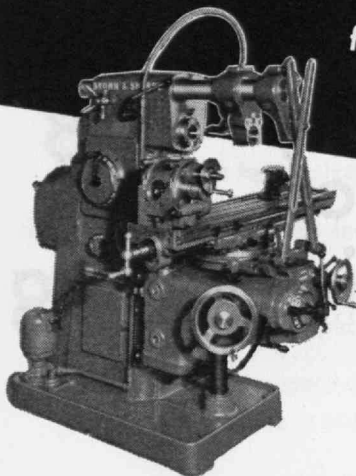
**Climax Molybdenum Company**  
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® C2


# NOW! A 5 HORSEPOWER No. 2 UNIVERSAL MILLING MACHINE

for heavier cuts



- Full 5 H.P. All Gear Drive to cutter.
- Exclusive Extended Spindle Face gives 8 important advantages.
- Independent All Gear Drive to cutting feed and fast travel movements.
- 18 Changes of Spindle Speeds.
- 18 Changes of Cutting Feeds.
- Full Automatic Lubrication.

This new machine has all the production boosting features of popular No. 2 Light Type Machine. A 5 H.P. No. 2 Plain Milling Machine, also available. For details write Brown & Sharpe Mfg. Co., Providence 1, R. I., U. S. A.

**BROWN & SHARPE** 

## Surface

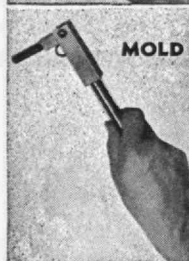
### PYROMETERS for every purpose

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Send for Bulletin 194SA.

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PIONEER MANUFACTURERS OF  
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Moisture Indicators and Recorders • Physical Testing Instruments  
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and many other Mechanical and Electrical Instruments

## MAIL RETURNS

### M.I.T. in Tokyo

The following communication, addressed to President Compton, from an Alumnus and former member of the staff in Physics and Chemistry, is reproduced not only for its general interest to Technology Alumni but also as an indication of the prestige which the Institute has acquired under the presidency of Dr. Compton. Accompanying Dr. Ikehara's letter were two Japanese volumes describing M.I.T. and dealing with educational methods at the Institute and, to a lesser extent, with educational methods used generally in colleges of science and engineering in the United States. It is understood that these volumes have received considerable attention in educational circles in Japan.

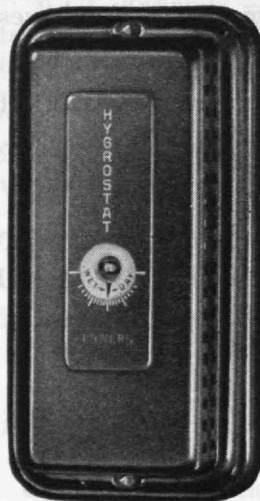
FROM SHIKAO IKEHARA, '28:

It is more than a year since you kindly sent me a letter through Dr. Edward L. Moreland, ['07]. At that time I had the pleasure of discussing educational problems with Dr. Moreland, but since then I have been painfully conscious of lack of my knowledge on American educational systems and ideals.

In January, 1945, while the war was still on, Dr. Koroku Wada, President of the Tokyo Institute of Technology, suggested that I present a reorganization plan of our Institute. Then I immediately visualized a modest M.I.T. in Tokyo, but my plan was buried in the turmoil of the time and in its subsequent chaos. The Report of the U.S. Education Mission to Japan marked, however, a new start of our educational systems. Through painstaking efforts of the Civil Information and Education Section of GHQ., my country is slowly learning the ideal and spirit of American education. In order to reorganize the higher educational institutions, the Japanese University

(Concluded on page 78)

## Want More Accurate HUMIDITY Control?



POWERS new type 190 Hygrostat may be your answer. It is pneumatically operated, sensitive to the slightest changes in relative humidity. Users state "it is the most accurate hygrostat made."

Controls valves or dampers in connection with heating or cooling coils, humidifiers, air washers, humidifying atomizers, spray nozzles, etc.

Used in processing and storage rooms in textile mills, industrial plants, laboratories, printing plants, telephone exchanges, and comfort air conditioning systems in all types of buildings.

Easy to install. Room and duct type instruments. Test one. You'll buy more to replace obsolete, inaccurate controls. Get Bulletin 302 for complete details.

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★ OFFICES IN 50 CITIES ★

**POWERS**

Over 55 years of  
TEMPERATURE and HUMIDITY CONTROL







## Food—ours to have and to hold

QUICK-FROZEN or in cans, dried or powdered, processed or in bulk, foods can now be kept fresh and flavorful from harvest to harvest . . . or longer.

For this we can thank research . . . and better materials.

There's nitrogen, for example, that protects the flavor and nutritional values of packaged foods. It is also used to protect delicate foods . . . butter and vegetable oils . . . keeping them sweet and free from undesirable odors.

Plastic-lined cans resist food acids and alkalis for months on end. They eliminate all contact with metal . . . and thus serve as an added guard against flavor contamination. Plastic-treated milk bottle hoods keep pouring surfaces sterile-clean . . . and new plastic containers, tough and pliable, "seal in" food's flavor and freshness.

Stainless steel, too, easily cleaned and sterilized, gives us

spoilage-free tanks, vats, hoppers, filters and great kettles that help prepare and process food for our use.

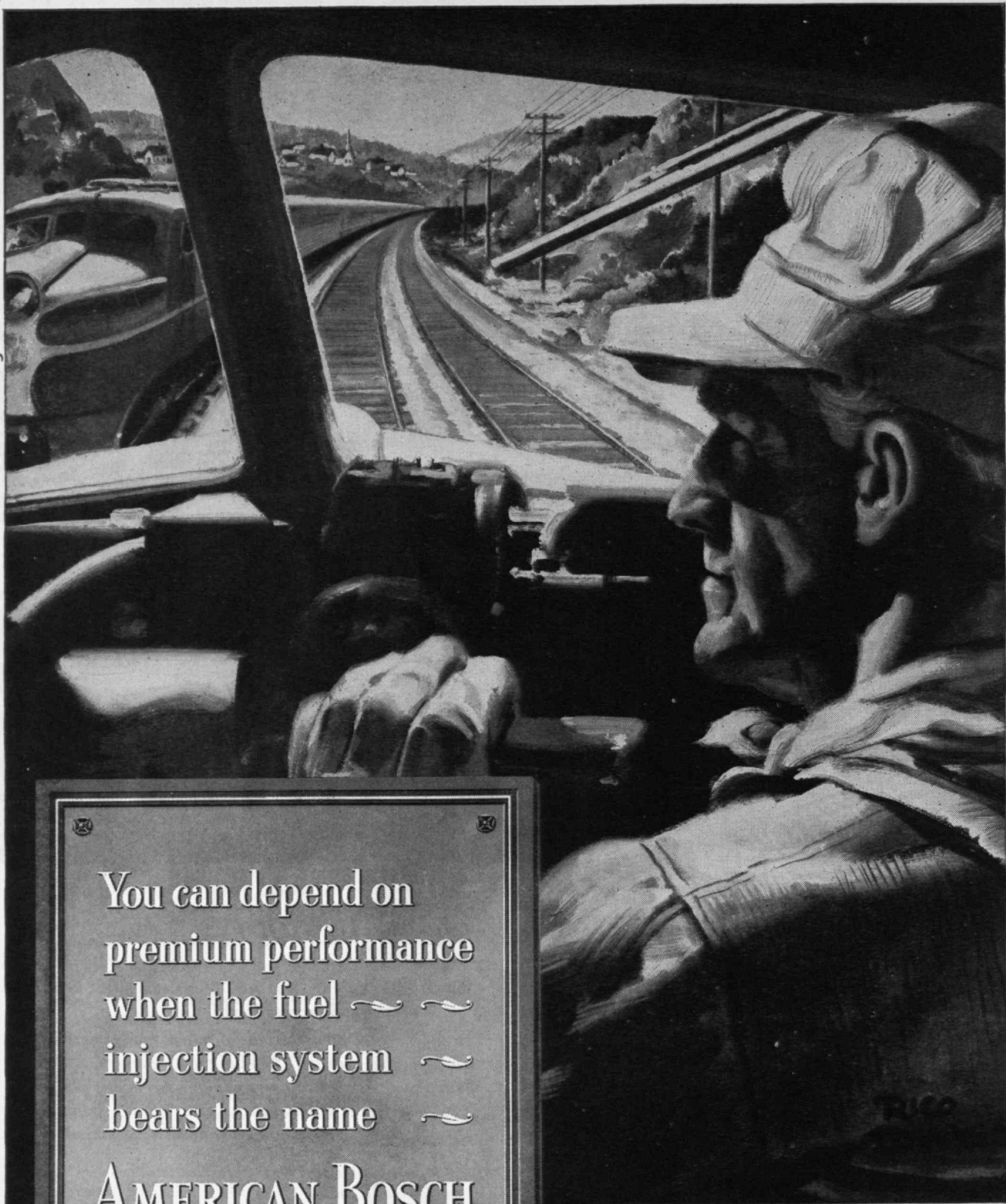
The people of Union Carbide produce many materials essential to the growing, handling and preservation of foods. They also produce hundreds of other materials for the use of science and industry, thus helping maintain American leadership in meeting the needs of mankind.

**FREE:** You are invited to send for the new illustrated booklet, "Products and Processes," which shows how science and industry use UCC's Alloys, Chemicals, Carbons, Gases and Plastics.

**UNION CARBIDE**  
AND CARBON CORPORATION  
30 EAST 42ND STREET **UCC** NEW YORK 17, N. Y.

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ELECTROMET ALLOYS AND METALS • HAYNES STELLITE ALLOYS • PRESTONE AND TREK ANTI-FREEZES • SYNTHETIC ORGANIC CHEMICALS



You can depend on  
premium performance  
when the fuel ~ ~  
injection system ~ ~  
bears the name ~ ~

AMERICAN BOSCH



AMERICA'S GREATEST NAME  
IN FUEL INJECTION  
EQUIPMENT

Part of a never-ending program of fuel injection research and development at American Bosch includes many thousands of hours devoted to the special requirements of Diesel locomotives.

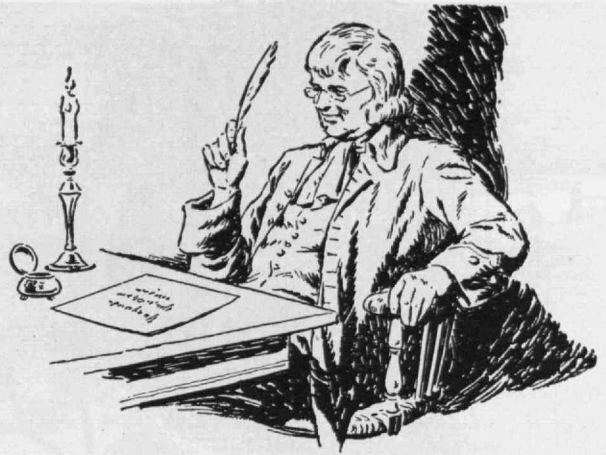
Today, American Bosch fuel injection systems feed a high percentage of these efficient, modern giants that are taking over an ever increasing share of the load on American railroads.

**American Bosch Corporation**  
Springfield 7, Massachusetts  
Service the Whole World Over

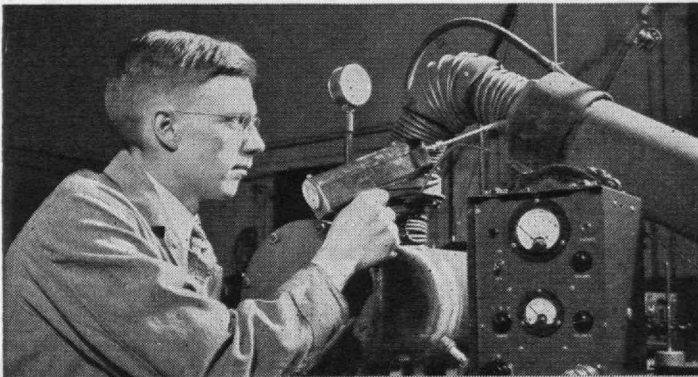


*"I chose my wife, as she did her wedding gown, not for a fine glossy surface, but such qualities as would wear well . . ."*

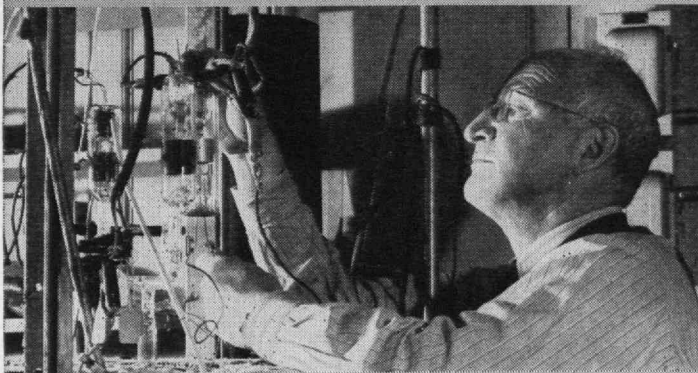
—THE VICAR OF WAKEFIELD



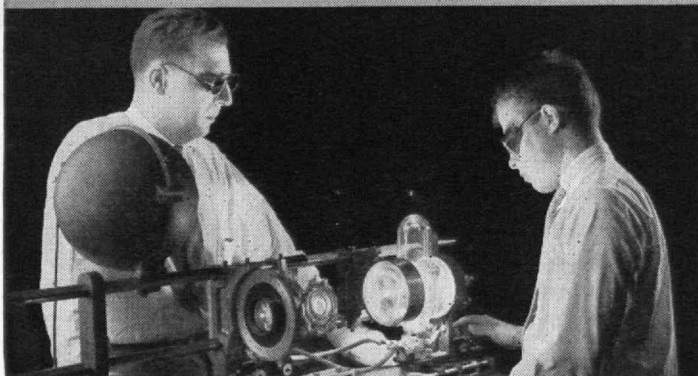
*... for "such qualities as would wear well"*



This electronic "sniffer" makes sure that every G-E refrigerator part is leak-proof.



High vacuums in G-E electronic tubes assure longer life and more efficient operation.



It takes 480 tests to determine whether a lamp meets General Electric standards.

THE dressmaker who pleased the vicar's wife, even as she herself pleased the vicar, did so, we submit, by a time-tested procedure: painstaking attention to the details that add up to excellence; assiduous care with the parts upon which is founded the quality of the whole.

The exacting requirements of customers like the vicar and his wife are those which General Electric products are built to meet. We feel that we could turn our wares beneath the vicar's appraising eye with equanimity.

Before the customer has a chance to examine a General Electric refrigerator, for example, specially developed electronic "sniffers" have made sure there is not the slightest leak in its refrigerating unit . . .

G-E radio tubes must pass tests that duplicate the impacts of naval broadsides and the vibrations of plane engines . . .

The General Electric lamps you see for sale have passed as many as 480 quality tests and inspections.

Every General Electric product is designed for high standards of performance . . . is tested to see that it will meet those standards . . . is built to serve you faithfully.

*You can put your confidence in*

**GENERAL  ELECTRIC**



# Lummus

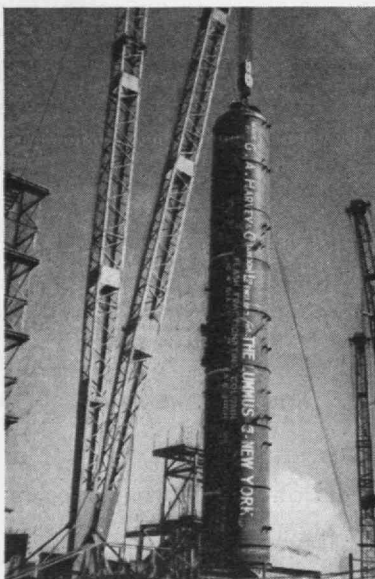
## *A World-Wide Organization*

Typical of Lummus foreign operations is the design and construction of a refinery by The Lummus Company of New York and Compania Anonima Venezolana Lummus for the Cardon Refinery of The Shell Oil Company of Venezuela.

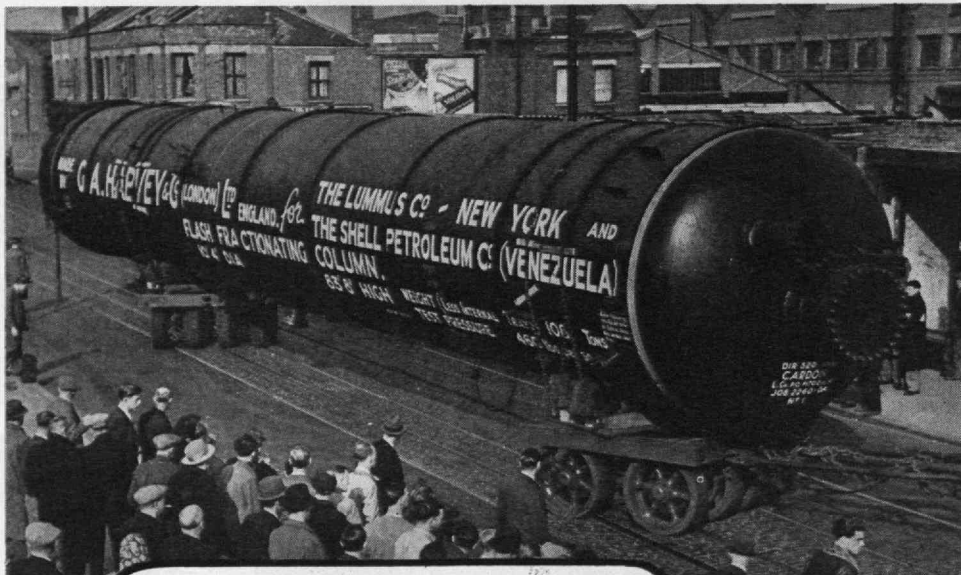
In oil producing states in America, all through Europe, in the Near East, Netherlands Indies, South America, China—Lummus has built more than 150 gasoline refineries, upwards of 90 process units for solvent refining and dewaxing of lube oils and more than 300 chemical units, including complete plants for ethylene, butadiene, styrene, phenol.

This large fractionating column, weighing over one hundred tons, was fabricated in England for The Lummus Company and shipped to Cardon.

A SHELL PHOTOGRAPH



Erecting fractionating column.



A SHELL PHOTOGRAPH

**THE LUMMUS COMPANY**  
420 Lexington Avenue, New York 17, N. Y.

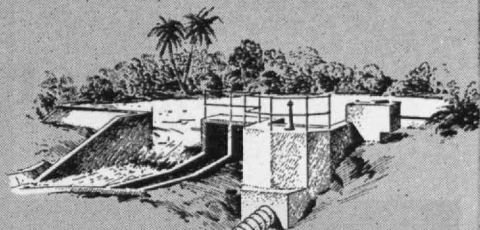
# LUMMUS

CHICAGO—600 South Michigan Avenue, Chicago 5, Ill.  
HOUSTON—Mellie Esperson Bldg., Houston 2, Texas  
LONDON—525 Oxford Street, London, W.1, England

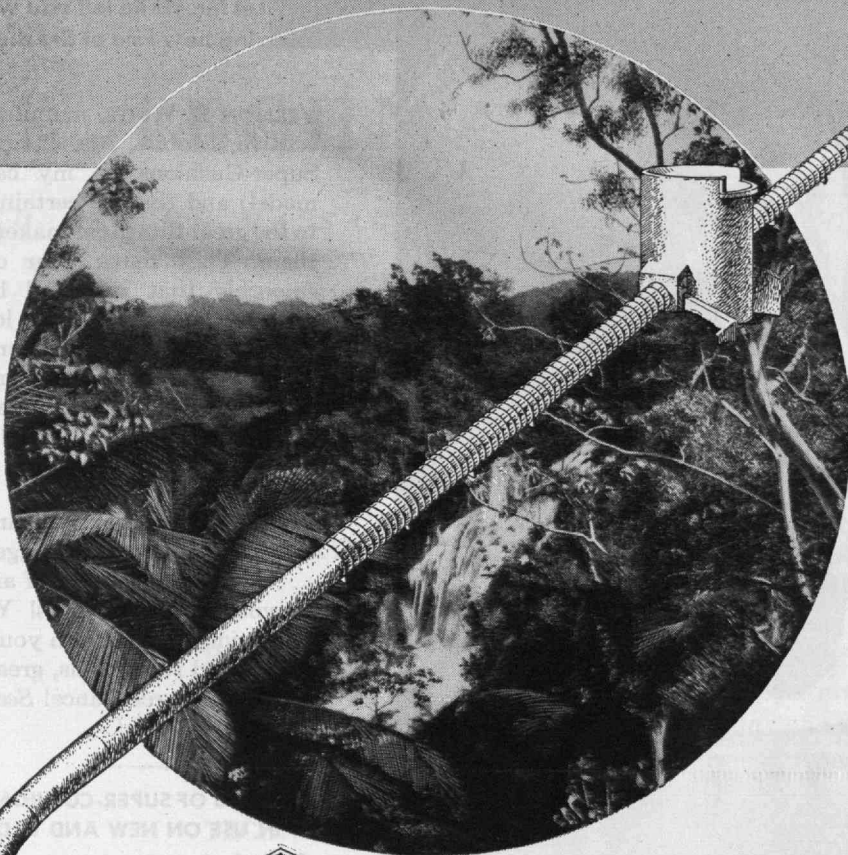




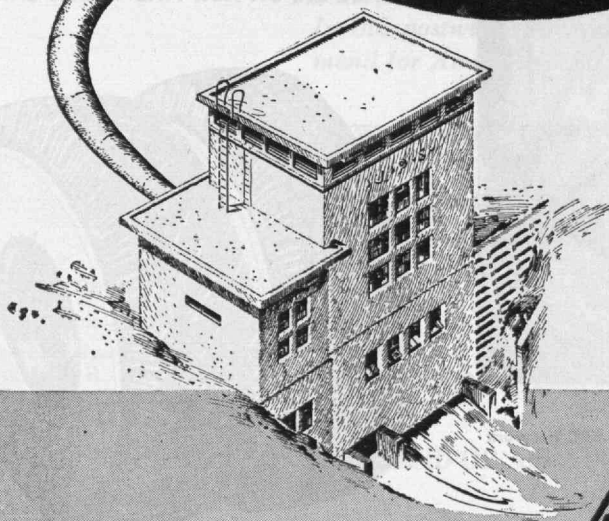
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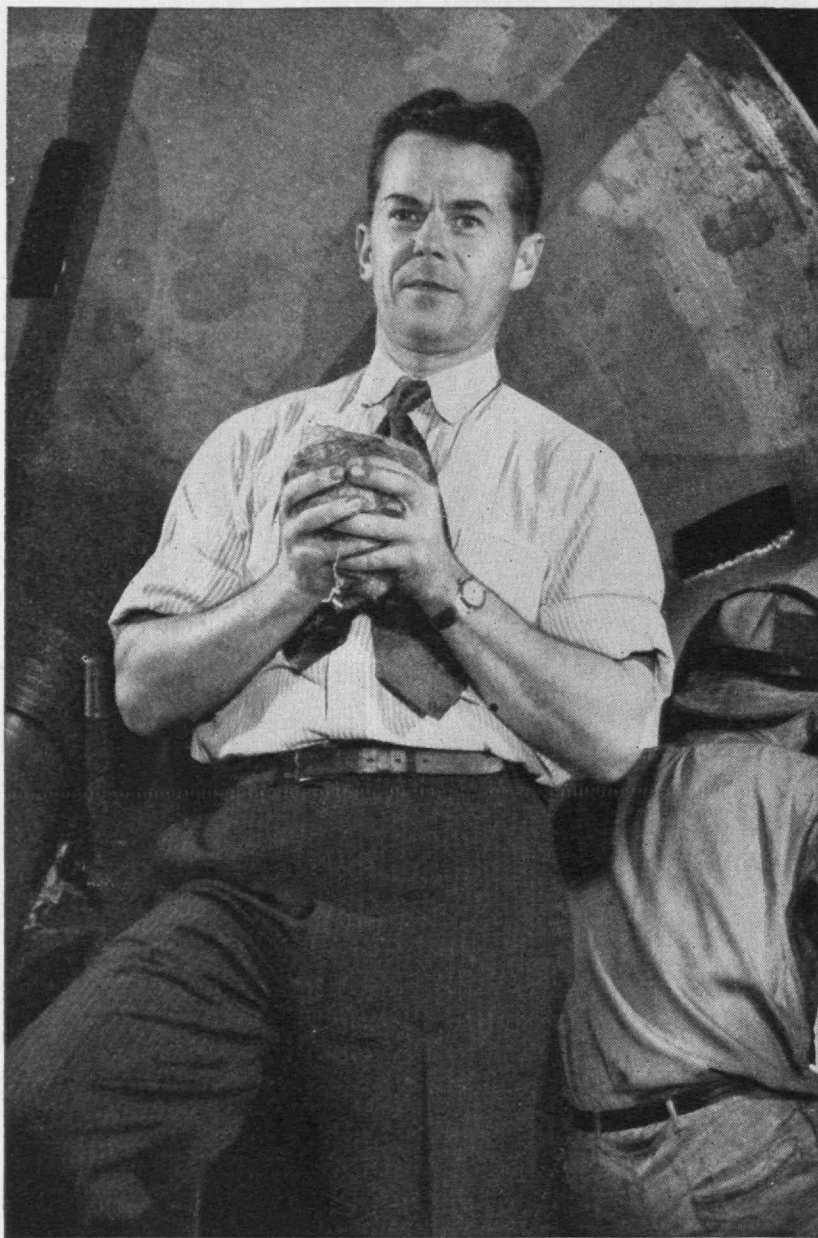
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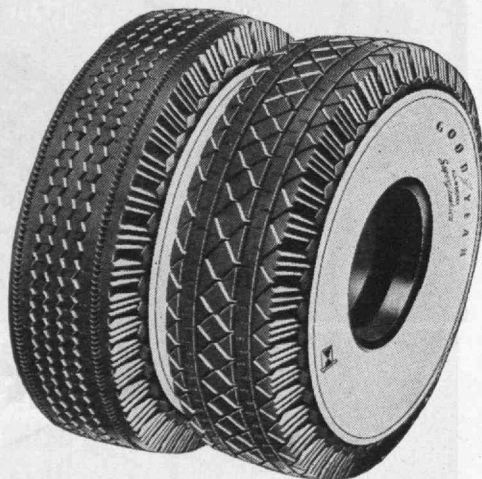
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Paul J. Woolf

# THE TECHNOLOGY REVIEW

TITLE REGISTERED, U. S. PATENT OFFICE

EDITED AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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M.I.T. Photo

**KARL TAYLOR COMPTON**

*President of the Massachusetts Institute of Technology; 1930-1948;  
Chairman of the Corporation, 1948.*



# THE TECHNOLOGY REVIEW

Vol. 51, No. 1



November, 1948

## The Trend of Affairs

### *New Era for Technology*

**A**CTING on the recommendation of Karl Taylor Compton, since 1930 President of M.I.T., the Corporation elected James Rhyne Killian, Jr., '26, to become the next, and tenth, president of the Institute, at its meeting on October 4. In his new position, Dr. Killian is the first graduate of M.I.T. to have the honor of becoming its president.

At the same meeting, Dr. Compton was elected chairman of the Corporation, and in his new capacity will continue to serve the Institute for which he has been the administrative head for the past 18 years. While Dr. Compton's new post provides relief from certain administrative responsibilities, he plans to devote full time to Institute activities, save for a special assignment in Washington for the months immediately ahead.

President Truman has appointed Dr. Compton as chairman of the Research and Development Board of the National Military Establishment. In this position he succeeds Vannevar Bush, '16, who has asked to be relieved on the ground that the chairmanship of this important office should be rotated among outstanding men instead of being held too long by any individual.

Thus it is that three men, two of them Technology Alumni, who have held the highest executive offices at M.I.T. become the logical subjects for the Trend of Affairs in opening Volume 51 of The Technology Review. The Review may, perhaps, be pardoned for taking more than usual pride in the election of the Institute's new president, for Dr. Killian began his career, immediately after his graduation from the Institute, when he was appointed assistant managing editor of The Review. He was appointed managing editor in 1927, and became editor in 1930, which, in the words of the Boston *Herald*, "he aided in making one of the country's most respected technical publications." When Dr. Bush left the Institute's vice-presidency to become president of the Carnegie Institution of Wash-

ington, Dr. Killian was selected by Dr. Compton to become executive assistant to the president in 1939. In 1943, Dr. Killian was made executive vice-president and he became vice-president in 1945. He assumed the new office as president designate on October 15. His formal inauguration as the Institute's tenth presi-



Fabian Bachrach

**JAMES RHYNE KILLIAN, JR., '26**

*President Designate of M.I.T.*

dent will take place next June in connection with commencement exercises and Alumni Day, 1949.

In making the announcement of Dr. Killian's election at a special convocation of the Faculty on October 5, Dr. Compton said:

By electing Dr. Killian to the presidency of the Massachusetts Institute of Technology, the Corporation has fulfilled the first of my two greatest ambitions for our institution. This has been to insure its future leadership of the highest possible caliber well in advance of my own retirement. Ever since the beginning of the war, Dr. Killian has carried a major portion of the duties of the President's Office with such constructive imagination, good judgment, and administrative skill as to have won the full confidence of the Corporation, staff and student body, and Alumni. The frequency with which he has been sought to advise or collaborate with outside agencies in education and public affairs, and to head other organizations, gives ample independent evidence of his qualifications.

The satisfaction and effectiveness with which our administration and staff serve M.I.T. are based on team work — the team work of highly competent men of diverse but related professional interests, bound together by common ideals of education, research and public service. I am delighted that Dr. Killian is to become the leader of this team. I am as confident of his success and loyal support by his colleagues as I am grateful to him and to them for their generous co-operation with me over more than eighteen years.

My second ambition is to do what may still be within my power to promote the usefulness of this institution and to secure the additional facilities and resources so urgently needed in these days of new technological requirements and improvements. By appointing me as its chairman, the M.I.T. Corporation gives me this great opportunity.

Dr. Killian's election at this time will permit me to devote time to the chairmanship of the Research and Development Board of the National Military Establishment, and these duties will take me to Washington for a while. I have been asked to take this assignment and conditions are such that there seems to be no proper alternative to my acceptance. I would not feel justified in doing so without having first assured the Institute's future administrative leadership.

During the war period when the scientific and engineering resources of the Institute were mobilized for service to the nation in research and special training, Dr. Compton and Dr. Killian shared the administrative responsibility of directing a vast and complex program. Under their leadership the Institute staff



*Harris and Ewing*

### **VANNEVAR BUSH, '16**

*Former Vice-president of Technology, whom Dr. Compton succeeds as chairman of the Research and Development Board of the National Military Establishment.*

increased from approximately 700 to more than 6,000 scientists and engineers who were associated with the operation of war projects and special courses in various parts of the United States and many foreign countries.

During the crucial years of World War II, it became necessary for Dr. Compton to spend a great deal of his time in government service as chief of the Office of Field Service of the Office of Scientific Research and Development, and on other scientific duties, working closely with M.I.T.'s former vice-president, Dr. Bush, the wartime head of O.S.R.D. It was during these critical years that Dr. Killian was the Institute's ranking administrative officer. For the period when President Compton was in the Philippines and in Japan, he was acting president of the Institute.

The Review joins with Technology Alumni in all parts of the world and with the Institute's Faculty and staff in wishing Dr. Killian every success in his new administrative post.

President Truman's appointment of Dr. Compton to serve the nation once again in a front-rank post in the administration of the nation's scientific man power and resources is the cause of rejoicing as well as of regret on the part of M.I.T. Alumni and Faculty. Certainly no more capable person could have been found to head the Research and Development Board of the National Military Establishment than Karl Taylor Compton. In these uncertain times, the selection of Dr. Compton as successor to Dr. Bush is doubly important, for it guarantees a continuation of the wholehearted co-operative teamwork between these two men which extends into the past for almost two decades. Dr. Compton's new duties will require that he spend a greater portion of his time in Washington than has been true in the last three years. To the extent that this is true, the Faculty and staff will miss the cordial personality that has directed M.I.T. affairs for the past 18 years. But there is also cause for rejoicing in the knowledge that Dr. Compton's new post as chairman of the Board will enable the Institute to benefit from the wise counsel, administrative leadership, and personal friendliness which have been such outstanding characteristics of the Institute's ninth president.

*(Continued on page 62)*



# Recent Additions TO M. I. T. BUILDING FACILITIES

*A New Dormitory and an Athletic Cage  
Head New Construction in the Institute's Program  
for Expanded Academic, Recreational, and Residential Facilities*

By THE REVIEW'S EDITORIAL STAFF

**T**HIRTY-TWO years ago this autumn, upon the opening of the 1916-1917 school year, the academic activities of the Institute's student body and instructing staff, then numbering 1,957 and 331, respectively, were initially established at the Cambridge site. Except for the Department of Architecture, which was destined to remain another two decades at the old Rogers Building — the original "Tech on Boylston Street," in Boston — the transition to Cambridge was complete. Occupancy of the "New Technology on the Charles," formally dedicated with appropriate pomp and ceremony in June, 1916, was hailed rightly as signalizing the beginning of a new Institute era. For this accomplishment, praise was accorded primarily to Richard C. Maclaurin, President, and the "mysterious Mr. Smith," who was not to be publicly identified as George Eastman until the month of January, 1920.

But in the planning of the New Technology, including the provisions for its expansion, the inspiration of its architect, Welles Bosworth, '89, was clearly evidenced. The main educational structure,\* which originally comprised Buildings 1, 2, 3, 4, 8, and 10, contained classrooms, laboratories, and offices for the Institute's needs as of 1916. At the time, there were but 45 students pursuing graduate courses, and the volume of research undertaken was very limited compared with present-day standards. Bosworth's vision, however, contemplated harmonious development as expansion became necessary. The main group of buildings was planned for expansion through the addition of connecting structures (such as Buildings 5, 6, and 7), and by extending wings northward, beyond the east-west axis of the great dome of Building 10. In the Bosworth plan, all buildings were to be connected under one roof.

Nor had student housing and recreational needs been neglected. The Institute's first dormitory — Ware, Atkinson, Runkle, Holman, Nichols, and Craft — accommodating approximately 225 students was completed in 1916. This L-shaped dormitory looked out onto the Charles River, and over the garden of the

president's house. A near-by quarter-mile running track, with a field house topped by a modest grandstand, was also available for use in the autumn of 1916; but construction on the president's house and the adjacent Walker Memorial was not completed until the spring of 1917. The Walker Memorial (funds for which had derived in large part from contributions by Alumni) was destined to become the center of undergraduate life, with facilities for dining and lounging, offices for student publications and other activities, a library, and a gymnasium. Immediately upon its completion, however, it was put to another use, serving as the *U.S.S. Walker Memorial* for the training of aviation cadets of the United States Navy until after the armistice of 1918.

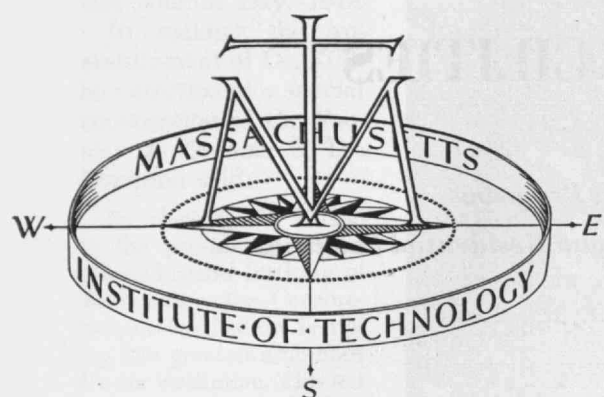
During World War I, also, much of Building 1 was devoted to ground-training units of air service personnel of the Army; and in the rear of Building 10 a number of temporary wooden buildings were erected for various war purposes. One of these, more sturdy and lasting than supposedly intended, later became the so-called Hangar Gymnasium, which was not torn down until early in World War II to give space for Building 24, erected for the Radiation Laboratory.

Upon the close of World War I, the country-wide recognition of the growing importance of technological education in an industrial economy, together with the achievements of M.I.T. and its Alumni in that conflict, was quickly reflected in an increase of registration to more than 3,000 students — more than half again as much as the 1916 figure. Coincidentally, there was a need for increasing the Institute's financial resources, and this was accomplished by the successful \$8,000,000 Educational Endowment Fund of 1919-1920, more than half of which was contributed by George Eastman who was at last revealed as the beneficent "Mr. Smith."

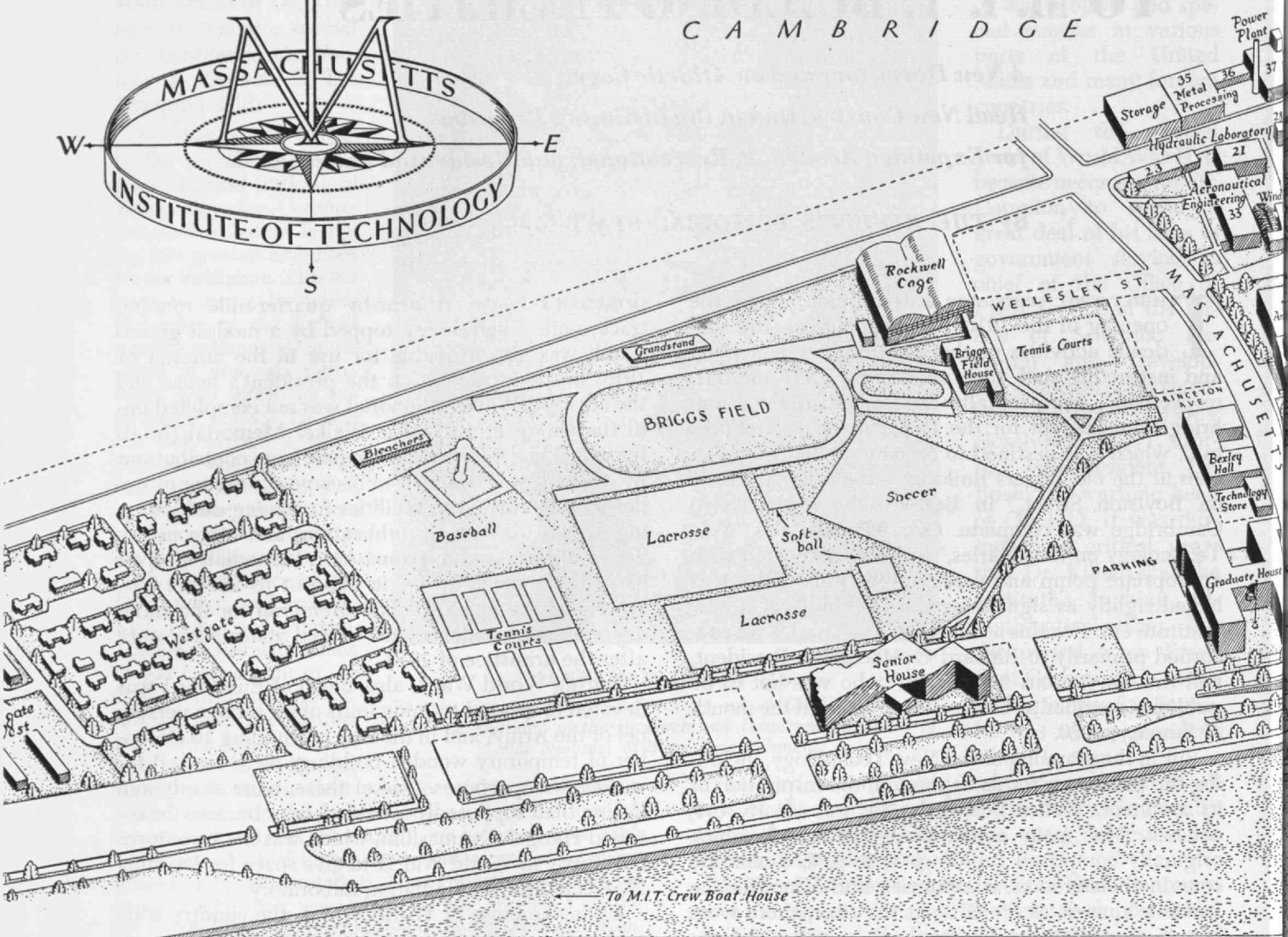
In 1920, the Pratt School of Naval Architecture and Marine Engineering (Building 5) was added; and in 1921 the Hydraulic Laboratory (Building 21) was completed. At the same time, to insure against needs of the future, needs not at the time specifically foreseeable, attention was turned to the feasibility of enlarging the area of the original Cambridge property. Thus, in 1924 some 24 acres west of Massachusetts Avenue were purchased.† The new area was about half

\* As a means of orientation, the aerial perspective sketch of M.I.T. (pages 22 and 23) will give the reader a good summary of present and projected construction, whereas the Table of Building Construction (page 24) will supplement the map by indicating the present purpose and use of M.I.T. structures, and will also indicate the year in which construction was completed or units were acquired for their present use.

† By the early 1930's, total Institute property west of Massachusetts Avenue was 40 acres.



# CITY OF CAMBRIDGE



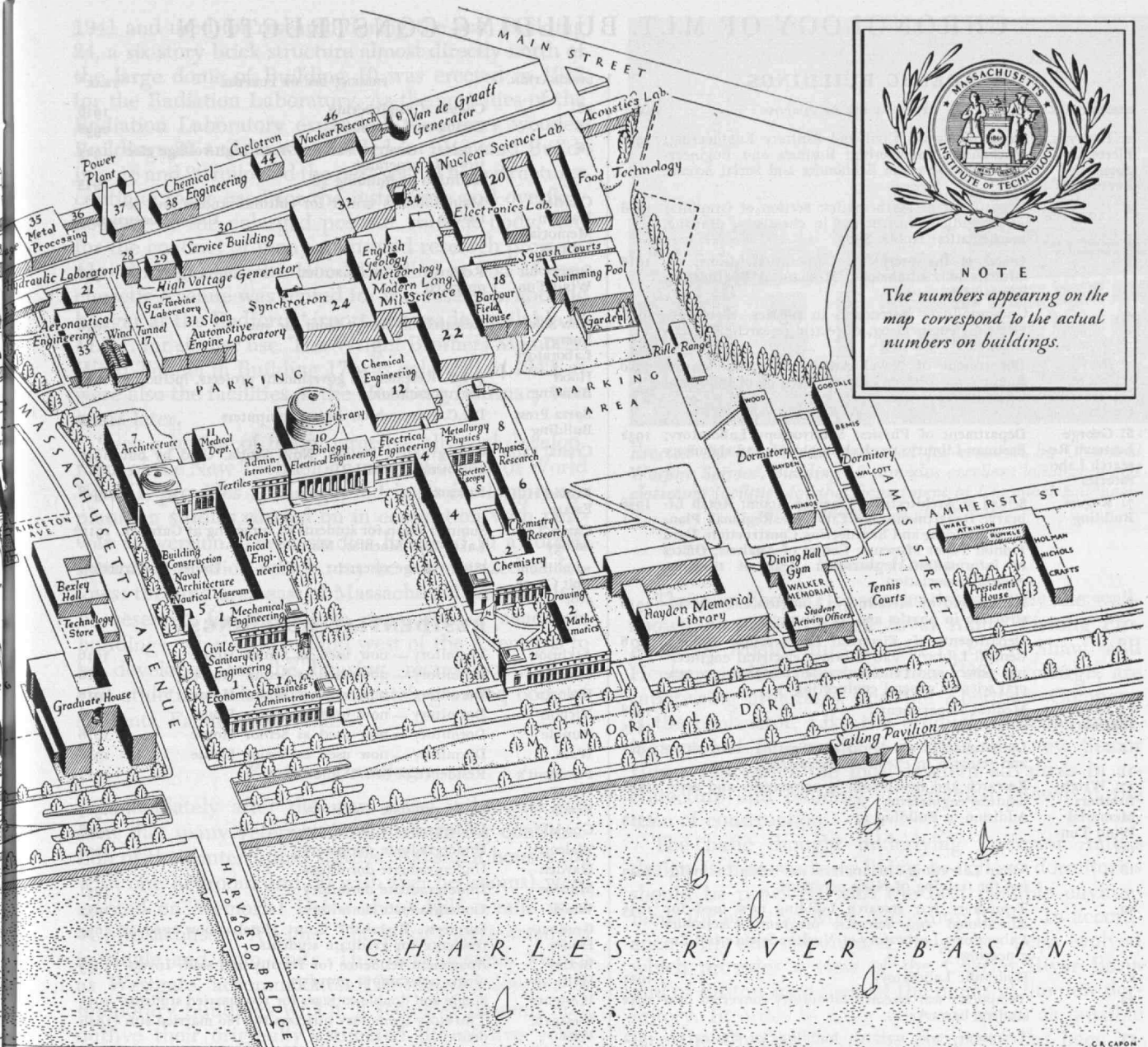
*Aerial perspective diagram of the western portion of Institute property along Memorial Drive, now planned largely for residence, recreational, and athletic needs for the Institute's growing needs.*

of the original Cambridge tract of approximately 50 acres lying east of the Avenue. Other additions to the plant during the 1920's were: the Bemis dormitory unit in 1924 (later supplemented by Goodale and Walcott in 1928, and Wood, Hayden, and Munroe in 1931) to provide housing accommodations for 483 students, in addition to the 225 housed in the first L-shaped dormitory; the Homberg Infirmary wing (Building 11); and the Guggenheim Aeronautical Laboratory (Building 33) in 1928.

Following the completion of the George Eastman Research Laboratories of Physics and Chemistry (Building 6) in 1932, construction of major new units was suspended for six years. In 1937, however, the Riverbank Court Hotel was acquired by purchase and converted into the Graduate House, accommodating 350-400 civilian advanced students. (During World War II, when it was used by the Navy V-12 Unit, its wartime capacity was raised to 900.) In 1938, the proceeds from the sale of the Rogers and Walker build-

ings on Boylston Street made possible the erection of a new Rogers Building (Building 7) to house the School of Architecture, and bring all of M.I.T.'s year-round academic activities to Cambridge. The new Rogers Building, moreover, gave the Institute an appropriate imposing entrance on its Massachusetts Avenue façade, in replacement of the undignified basement entry, officially designated by its street number, 69, but conversationally alluded to, by those who used it not infrequently, as the unaesthetic "family entrance." In the same year, 1938, the Wright Brothers Memorial Wind Tunnel and the building for the cyclotron were completed. The Hyams High Voltage Laboratory and the first Solar Energy Laboratory were completed in 1939, and the Bexley Hall apartment building was purchased also in 1939. This four-story brick structure, containing 48 housekeeping suites, was the Institute's first provision for offering much needed living quarters to younger married members of the rapidly expanding staff.





*The eastern portion of Institute property along Memorial Drive. It is here, adjacent to the original group of Cambridge buildings, that future additions to academic buildings will be made.*

As to recreational, sport, and athletic facilities, it may be recalled that the Barbour Field House, providing locker rooms, showers, and squash courts, came into use in 1934. Five years later, in 1939, the Briggs Field House, west of Massachusetts Avenue, was completed as an athletic center for track and other field sports. In 1936, the Sailing Pavilion was finished and equipped with a fleet of dinghies. It is largely because of the popular support of dinghy sailing that intercollegiate sailing in this country was revived, and enabled one M.I.T. student to finish second in the 1948 Olympic sailing races. The Alumni Pool, opened in 1940, offered M.I.T. students, for the first time, an opportunity to engage in swimming with facilities adjacent to the main buildings and dormitories.

Scarcely had World War II begun in September, 1939, than it became apparent that the Institute would be destined, almost immediately, to play an exceedingly important and active role in research and the training of scientific and engineering personnel to in-

sure the nation's welfare and security. The demands were urgent and it became clear that the Institute's prewar plant would be inadequate for the Herculean task so ably recorded in the recently published volume by John E. Burchard, '23, Q.E.D. — M.I.T. in World War II.

### **Construction During World War II**

Thus, during the early 1940's and at quickened tempo after the Pearl Harbor attack, there arose on Institute property a substantial number of new structures. The Sloan Automotive Laboratory was enlarged in 1940, in time for the conduct of important war research. Building 12, which had previously been planned as new quarters for the Department of Chemical Engineering, was hurried to completion in 1941 and during the war was under lease to the Chemical Warfare Service of the United States Army for research purposes. Building 32, a large wooden structure on Vassar Street, was likewise completed in

# CHRONOLOGY OF M.I.T. BUILDING CONSTRUCTION

## ACADEMIC BUILDINGS

DESIGNATION	PRESENT USE OR PURPOSE	YEAR*
1: Henry L. Pierce Engineering Laboratory	Departments of: Civil and Sanitary Engineering; Mechanical Engineering; Business and Engineering Administration; Economics and Social Science	1916
2	Department of Mathematics; Section of Graphics; undergraduate instruction in chemistry, drawing, mathematics; Hobby Shop	1916
3	Offices of the president, Corporation, deans, administration, admissions; Mechanical Engineering laboratories	1916
4	Undergraduate instruction in physics, chemistry, electrical engineering, dielectric research; Bursar's Office	1916
5: Pratt School of Naval Architecture	Department of Naval Architecture and Marine Engineering; Dewey Library; Division of Industrial Co-operation	1920
6: George Eastman Research Laboratories	Department of Physics; Spectroscopy Laboratory; Eastman Library; research in physics and chemistry	1932
7: Rogers Building	School of Architecture; Emerson Room; Rotch Library. Departments of: City and Regional Planning; Building and Engineering Construction. Dard Hunter Paper Museum; Center of Analysis; Offices of information, registration, dean of students, Alumni Association	1938
8	Department of Metallurgy; Lindgren Library; instruction in physics and metallurgy	1916
10	Departments of: Electrical Engineering; Biology. Central Library; Vail Library; electrical engineering power and communication laboratories; general science; general engineering	1916
11: Homberg Infirmary	Medical Department Alterations	1928 1945
12	Department of Chemical Engineering; instruction and research in chemical engineering	1941
17: Wright Brothers Memorial Wind Tunnel	Research and instruction in aeronautics and aeronautical engineering Addition to Building 17	1938 1943
18	Sonar Laboratory; temporary war research building for training of Navy personnel	1943
20	Temporary war research building now used for educational and research program; Electronics Laboratory; Laboratory of Nuclear Science and Engineering	1943
21	Hydraulic Laboratory	1921
22	Temporary war research laboratory converted into student barracks	1942
23	Temporary war research building for flutter research	1942
24	Departments of: English and History; Modern Languages; Geology; Military Science and Tactics. Superintendent's Office; research in x-rays; the synchrotron	1942
28: Hvams High-Voltage Laboratory	Research in high-voltage radiography	1939
29: Tractor House	Garage	1923
30	Service Building	1920
31: Sloan Automotive and Aircraft Engine Laboratory.	Research in automotive and airplane engines Enlargement of Building 31	1928 1940 and 1946
31-A: Gas Turbine Laboratory	Research and instruction in gas turbines	1947
32	Temporary war research laboratory; now used for educational and research program in servomechanisms	1941
33: Guggenheim Aeronautical Laboratory	Department of Aeronautical Engineering; Aeronautical Library	1928
34	Original Solar Energy Laboratory	1939
35	Metal Processing Laboratory	1916
36	Garage	1916
37	Power Plant	1916

DESIGNATION	PRESENT USE OR PURPOSE	YEAR*
38	Chemical Engineering	1916
44	Cyclotron Laboratory	1938
46	Nuclear research; Van de Graaff high-voltage electrostatic generator Addition to Building 46	1923 1943
Charles Hayden Memorial Library	Main Library; center for cultural studies and activities Under Construction	
Supersonic Wind Tunnel	Research in aeronautics; Navy owned, M.I.T. operated	1948
New Solar Energy Laboratory	Research on energy from the sun	1946
Hood Building	D.I.C. Research on government projects, including instrumentation	1942
Barta Press Building	D.I.C. Research on digital computers	1947
Crystal Farm	Geology Field Station, Nova Scotia. Used by but not owned by M.I.T.	1947
Round Hill Estate	Research	1948
Camp Technology	Summer camp for students in surveying at Gardner Lake, East Machias, Maine	1912
12-million Volt Generator	High-voltage research Under Construction	

## RESIDENTIAL BUILDINGS

Atkinson	Dormitory — now used as Senior House	1916
Craft	Dormitory — now used as Senior House	1916
Holman	Dormitory — now used as Senior House	1916
Nichols	Dormitory — now used as Senior House	1916
Runkle	Dormitory — now used as Senior House	1916
Ware	Dormitory — now used as Senior House	1916
President's House	Residence of M.I.T. president	1917
Bemis	Undergraduate dormitory	1924
Goodale	Undergraduate dormitory	1928
Walcott	Undergraduate dormitory	1928
Hayden	Undergraduate dormitory	1931
Munroe	Undergraduate dormitory	1931
Wood	Undergraduate dormitory	1931
Graduate House	Formerly, Riverbank Court Hotel — now used as residence for graduate students	1937
Bexley Hall	Apartment residence for Faculty and staff. Investment; not campus property	1939
Westgate	Single and double cottages for 100 married students	1945
Westgate West	Two-story temporary quarters for 180 married students	1946
Senior House	Dormitory for seniors Under Construction	

## RECREATIONAL, SPORT, AND ATHLETIC FACILITIES

Walker Memorial	Morss Dining Hall; offices for student government and extracurricular activities; Pritchett Lounge; Walker Library; gymnasium; handball courts; bowling alleys	1917
Boathouse	Shells and rowing equipment for crew	1922
Barbour Field House	Squash courts, locker rooms, showers	1934
Sailing Pavilion	M.I.T. Nautical Association; dinghy and sloop sailing	1936
Briggs Field House	Athletic center for track and other field sports; lockers, showers	1939
Alumni Pool	Swimming pool	1940
Rockwell Athletic Cage	Enclosed track and cages for indoor sports and competitions	1948

## PROJECTED CONSTRUCTION

Metals Processing Laboratory
Biology and Food Technology Building
Laboratory for Nuclear Science and Engineering
Towing Tank and Hydrodynamics Laboratory
Faculty Club

\* Date given is the year in which property was built or acquired for present use as indicated in the center column.



1941 and used for research during the war. Building 24, a six-story brick structure almost directly north of the large dome of Building 10 was erected in 1942 for the Radiation Laboratory. As the activities of the Radiation Laboratory expanded, temporary wooden Buildings 22 and 23 were added in 1942, and Buildings 18 and 20 followed the next year. These structures continue to be used for the instruction and overflow housing of the enlarged postwar student body, and for the conduct of many sponsored research projects. Also during 1942, the Hood Building at 155 Massachusetts Avenue was rented for war research, and the hangar at the Bedford Airport was made available to M.I.T. for similar use. The Wright Brothers Memorial Wind Tunnel in Building 17 was enlarged in 1943, as were also the facilities of the Homberg Infirmary two years later.

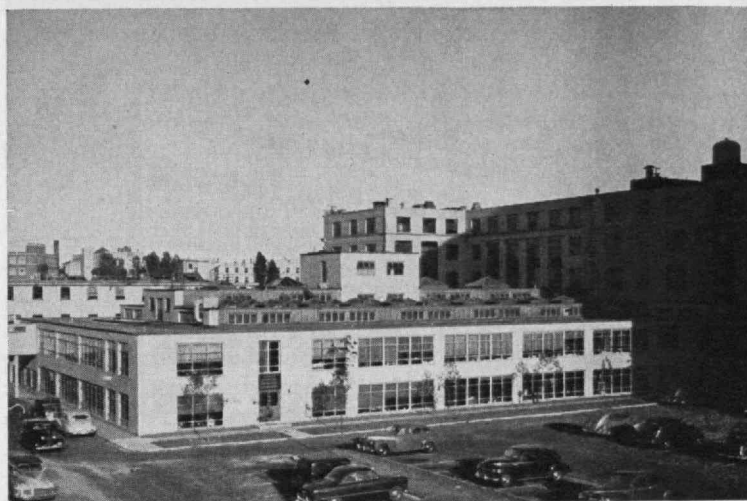
Such a review of the progressive physical development of the New Technology, up to the close of World War II, provides a background basis for long-range planning studies carried on in connection with post-war conversion. These studies have led to a fundamental conclusion which may be summarized as follows: the land area east of Massachusetts Avenue will be reserved for the future expansion of academic buildings, whereas that land west of the Avenue is to be developed for the housing, recreational, sport, and athletic needs of the Institute's growing body of students, Faculty, and staff.

### Postwar Housing

Immediately after the war, when it became evident that many veterans would return for continuation of their interrupted studies, 100 small houses (50 with one bedroom and 50 with two bedrooms) were erected on Memorial Drive about half a mile west of Massachusetts Avenue. The houses were arranged in single and twin units. This development, known as Westgate, accommodates 100 married couples in temporary buildings which, it seems at present, may outlive their originally estimated life of five years. Just west of Westgate is a group of two-story wooden buildings (formerly used by the Navy) serving as temporary apartments for 180 married couples.

Of course not all students live on the west side of Massachusetts Avenue; some live at home, others at fraternities in Cambridge and near-by Boston; and the dormitories east of Massachusetts Avenue, erected between 1916 and 1931, also do a thriving business. In addition, Building 22, one of the temporary buildings erected for war research and adjacent to the old Radiation Laboratory, has been converted into a barracks for 600 students under the present and very urgent need for adequate housing of the student body.

But if the Institute's housing units, like those of any other modern community, appear to be bursting at the seams, it is pleasant to be able to record that relief is in sight. As chronicled in past issues of *The Review*, a new Senior House for 362 students has been planned, and is now nearing completion on Institute property on Memorial Drive, between Danforth and Endicott Streets.



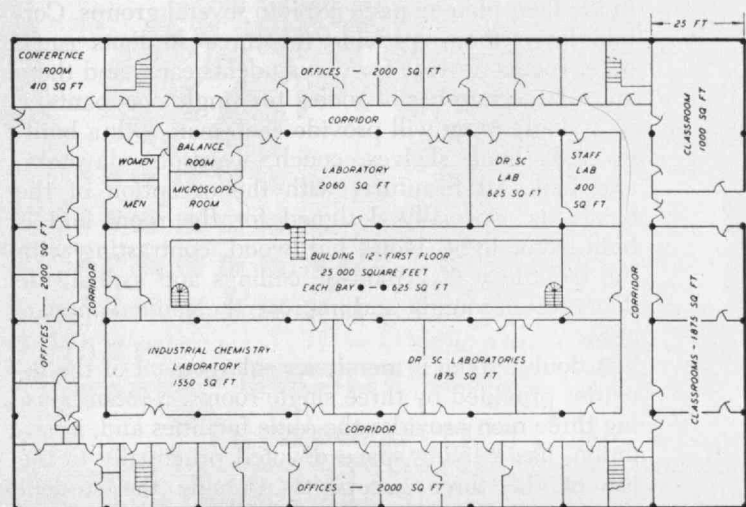
M.I.T. Photo

Erected during the war and used for research by Chemical Warfare Service, Building 12 provides excellent laboratory and classroom facilities for the Department of Chemical Engineering. Building 10 is at the right.

### Senior House

The new Senior House was designed by the well-known Finnish architect, Alvar Aalto, Visiting Professor of Architecture at M.I.T. Perry, Shaw, and Hepburn, with Robert C. Dean, '26, in charge, are supervising architects, and the Aberthaw Company is the contractor. Like the original academic buildings of M.I.T., completed in 1916, the new Senior House represents the most modern advances in architecture and building construction known at the time of construction.

The basic thought underlying Professor Aalto's design is that students living in college dormitories should be provided with the best possible environment for effective work and group living. In accordance with this objective, a design has been evolved which provides a view of the Charles River Basin and of Boston from most of the rooms in the new dormitory. In order to have as many rooms as possible face the Charles River, the dormitory has been arranged in a combination of zigzag and serpentine form which provides a maximum southerly exposure.



Plan of the first floor of the new building for the Department of Chemical Engineering.



M.I.T. Photo

Erected and used during the war for the M.I.T. Radiation Laboratory, Building 24, highest on the Institute lot, now houses the Departments of Meteorology, Geology, English and History, and Modern Languages. It also serves as headquarters for the Department of Military Science and Tactics, and for the superintendent of buildings.

About 65 rooms, as well as the corridors, stairways, bathrooms, lounging rooms, and general living areas have been provided on the north side of the building overlooking the playing fields.

The Senior House is six stories high. On the ground floor are provided a lounge, dining room, music rooms, club room, and hobby room. On the first floor are arranged the principal lounge, the balcony of the dining room, which is a portion of the lounge space, the offices, the director's suite, and typical students' rooms as shown in the floor plan on page 28. The second and upper floors are all similar in their arrangement of student rooms, having almost all individual rooms on the south or River side, and collective living rooms on the north side.

On a typical floor, the rooms are divided (as shown in the floor plan on page 28) into several groups. Certain large rooms provide for three students each; other rooms provide for two students each, and there are a large number of rooms for single occupants.

A single room will provide each man with a built-in desk, book shelves, couch, wardrobe, lavatory, and bed. All furniture, with the exception of the chairs, is especially designed for the room and is built-in, of light, blond hardwood, contrasting with the red tile walls. Acoustic ceilings and asphalt-tile floors soften sounds, and improve the general appearance.

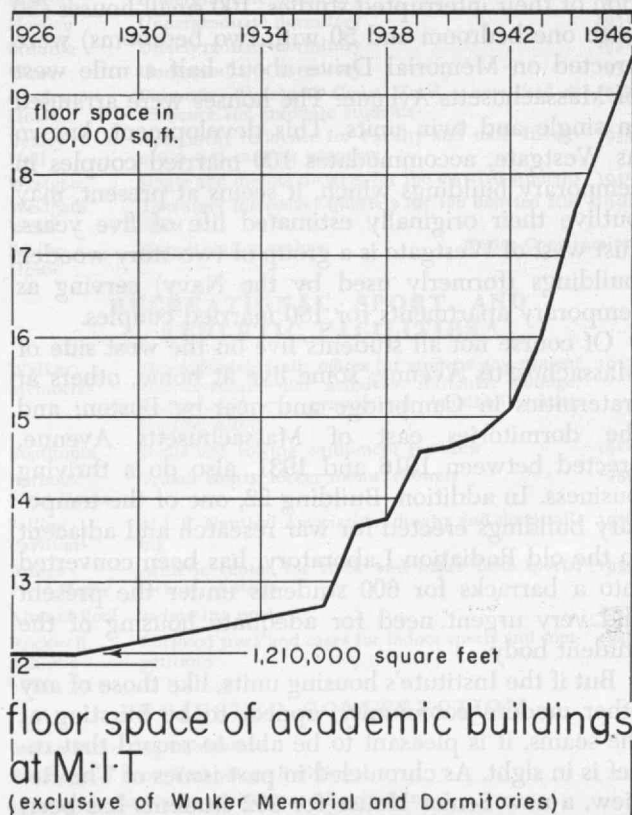
A double room is merely an enlargement of the facilities provided by three single rooms; a room housing three men provides the same facilities and, in addition, has a living space devoted principally to the use of the three occupants. Outside the student rooms, and occurring generally as an enlargement of the corridor, are living areas which will be attractively furnished with living room furniture, provid-

ing a space where general discussions can be carried on without interference with study in individual rooms. The dining room on the ground floor is an especially pleasant feature, with two sides standing free from the building and provided with its own sunken garden and view of the River. The balcony around this dining room, at the first floor level, makes an extension of the main lounge. The dining room will be lighted by numerous round skylights, especially designed for the room, which will provide a down light both by day and, with the use of artificial light, by night. The latest in kitchen equipment will be provided to serve the dining room and its terraces.

One of the interesting features of the building is the long cantilevered stairway which hangs from the north wall, allowing the students continuous travel by easy stages to each of the six floors. The building is also provided with an elevator and other stairways of more conventional type. The outside of the building is to be built of red brick to harmonize with the other buildings in this section of Memorial Drive.

### Alumni Participation

The Corporation had earmarked \$1,700,000 for construction of the Senior House, which appeared to be an appropriate capital investment for the amount of income to be expected from the new dormitory. The estimated cost of construction, however, was in excess of \$2,000,000 and, for a time, it looked as if this new housing unit would have to be indefinitely postponed. It was at this point that Francis J. Chesterman, '05, then chairman of the Alumni Fund Board, ob-



M.I.T. Illustration Service

Floor space of academic buildings at the Institute in the past decade and a half approximates an exponential growth curve.



tained approval of that Board to make available to the Corporation a gift of \$500,000 from the Alumni to be used in the construction of the new Senior House. Announcement of this gift was made by Mr. Chesterman at the Alumni Banquet on June 14, 1947, as recorded on page 537 of the July, 1947, Review. Construction of the new housing unit was thereby definitely assured, and ground was broken for the new dormitory on the following October 6, as recorded on pages 40 and 42 of the November Review, and on page 105 of the December issue.

Although the Senior House faces the Charles River, entrance to the building will be from the north side, adjacent to the athletic field. The front of the building presents the appearance of being built in smooth curves. Actually, however, curved steel beams would have increased the construction out of proportion to the benefits to be gained, and all steel-work uses straight I beams. The serpentine effect on the Memorial Drive side is not carried out on the north side, which has more conventional lines.

If the academic and housing quarters have been augmented during the past years, the same may be said of the athletic and recreational facilities.

### **Rockwell Athletic Cage**

Latest addition to the physical facilities of the Institute, in furthering its program of physical education, intramural sports, and varsity competition, is the Rockwell Athletic Cage which, as recorded in the July, 1948, issue of The Review, was dedicated last June 12 as part of the Alumni Day ceremonies. This new unit has been named in honor of Dr. John A. Rockwell, '96, who served for half a century on the Alumni Advisory Council on Athletics, and was its chairman from 1914 until 1947 when this Council was succeeded by the Athletic Board.

Fortunately, the Rockwell Athletic Cage is made available just at the time when the Institute's expanded program of athletics and enlarged student body will be able to make the most effective use of it, and the building comes to Technology in a somewhat unusual way.

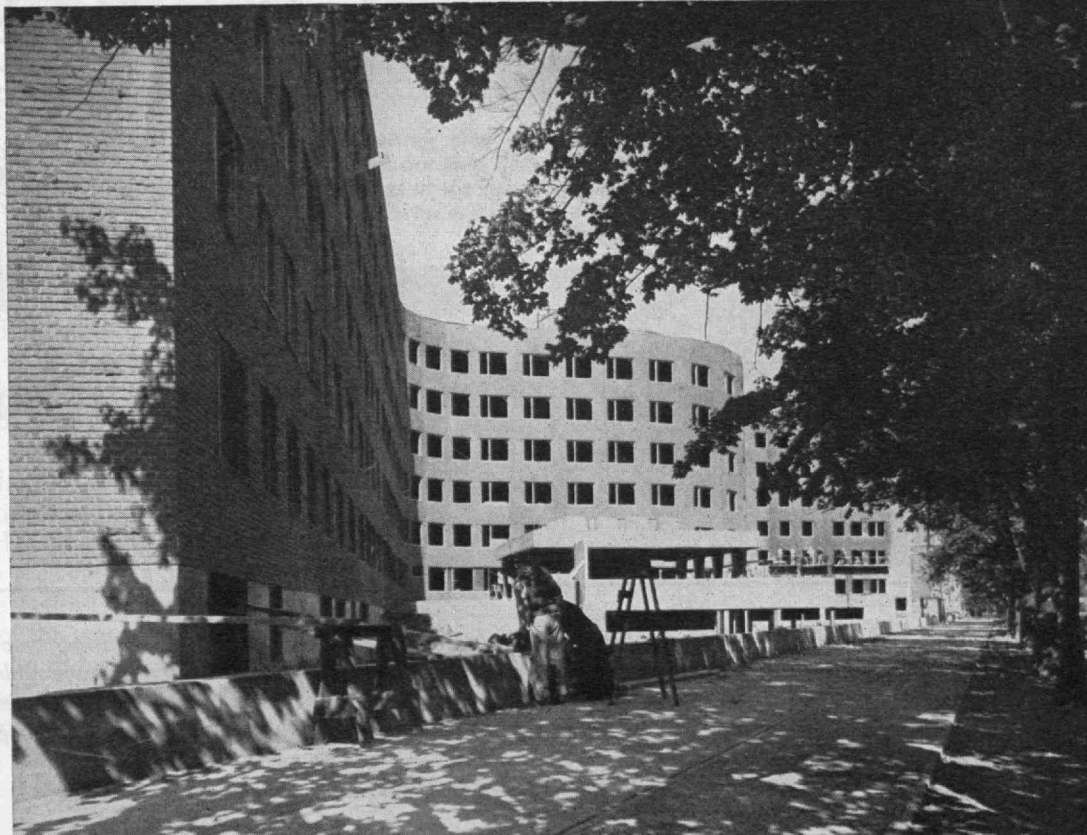
Upon conclusion of World War II, one of the Navy's recreation and drill halls at Camp Peary, Va., was among wartime equipment to be declared surplus material by the War Assets Administration. This hall was ideally suited to the needs of the Institute's growing athletic program, and was acquired from the Government in the spring of 1947. Since the new cage was intended to be a permanent addition to the Institute's buildings, it was decided that the wooden side walls of the original Navy recreation hall should take on a more permanent form. Accordingly, only the large arched wooden girders and roof timbers were transported from Camp Peary to Institute property in Cambridge by Navy barges during the summer and early fall of 1947.

While this work was in progress, plans were being made for the new Rockwell Athletic Cage which was to be located on Vassar Street, adjacent to and connecting the Briggs Field House.

The Rockwell Athletic Cage now offers facilities for indoor athletics never before available at M.I.T. The cage is 200 feet long and 165 feet wide with an inside height (to the bottom of the arched girders) of 30 feet. The sides of the cage are of cinder-block construction for a height of 9 feet, above which the remaining 21 feet of wall is of clear, plain glass with steel encasements or frames. At the sides and in the center of the cage are steel beams which divide the cage into two equal parts, 100 feet by 165 feet each and support the 100-foot arched roof trusses. As a result of this construction, which provides two large

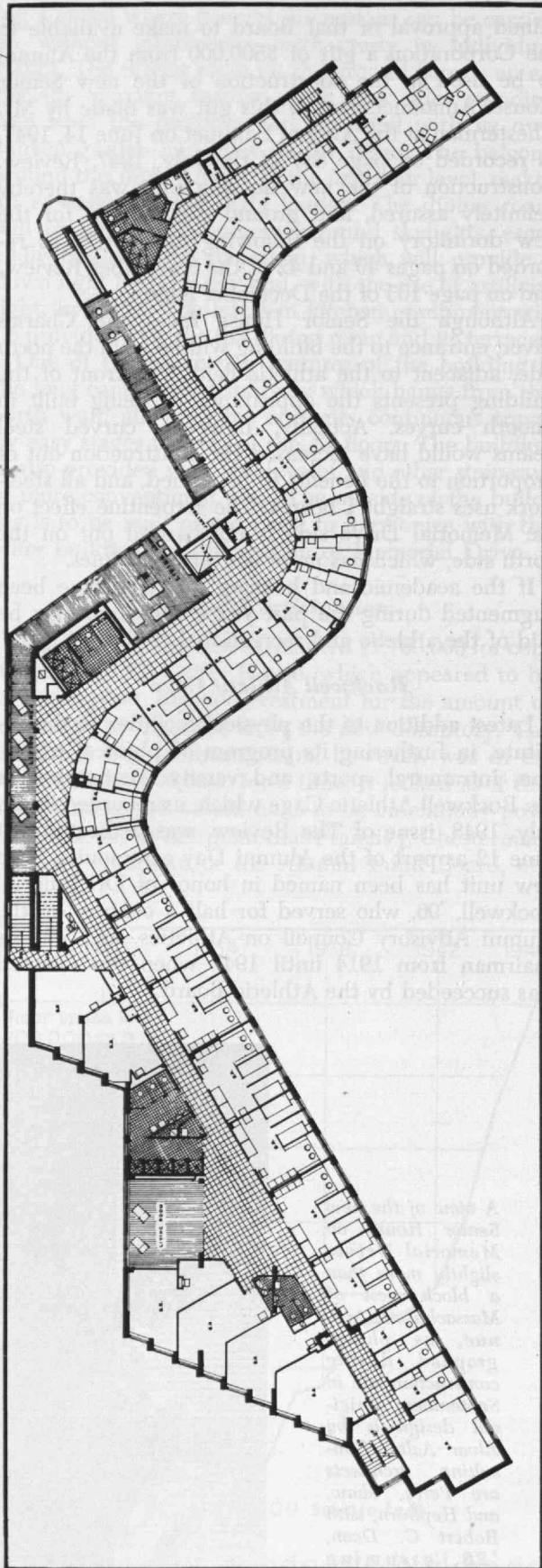
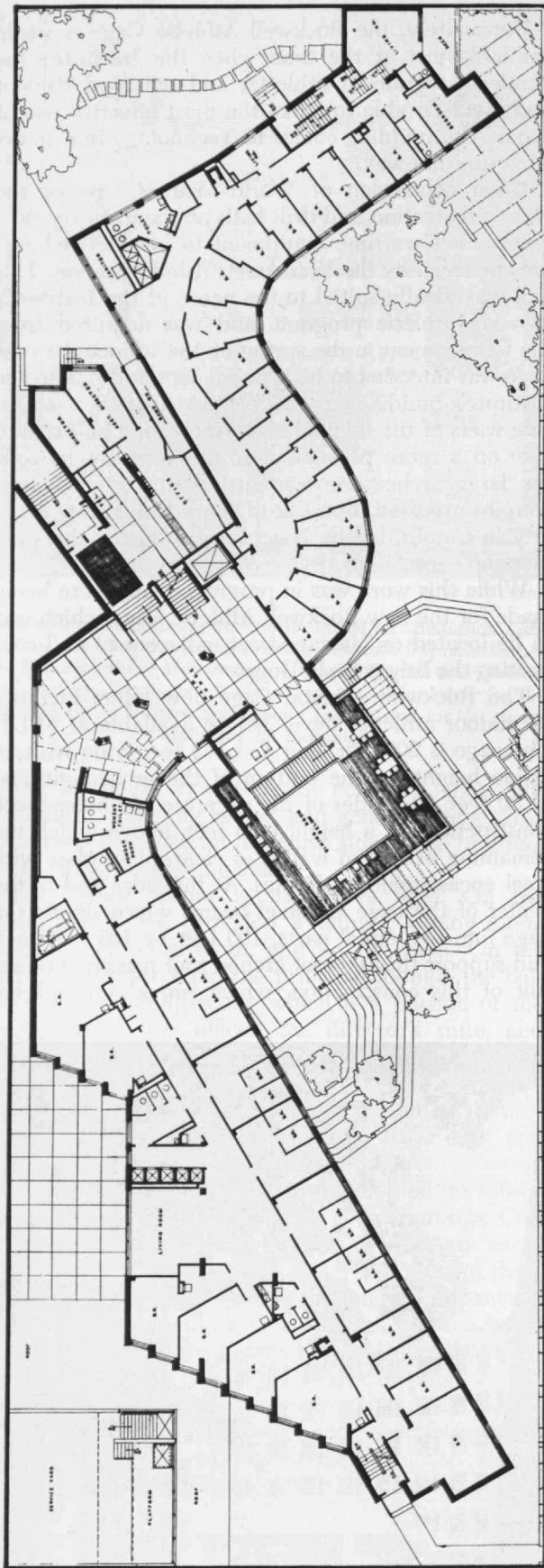
*A view of the new Senior House on Memorial Drive, slightly more than a block west of Massachusetts Avenue, as photographed during construction late in September. Original design is by Alvar Aalto. Consulting architects are Perry, Shaw, and Hepburn, with Robert C. Dean, '26, assuming charge for this new dormitory. Aberthaw Company is the contractor.*

M.I.T. Photo



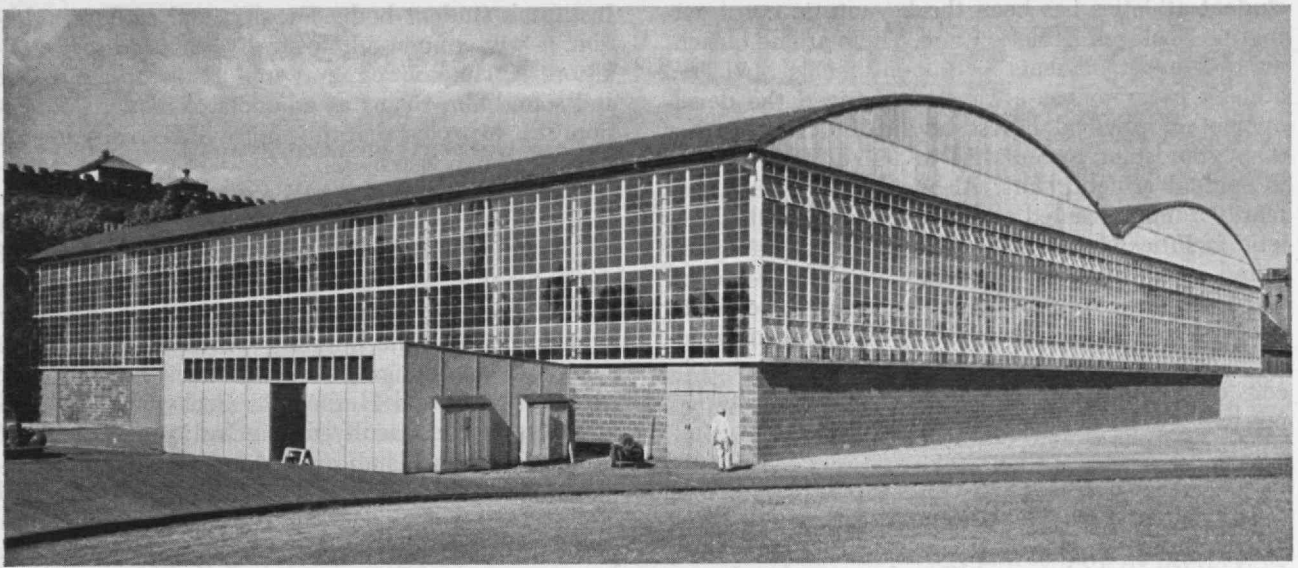


DESIGNER  
ALVARO SIZO  
ARCHITECTS  
BOSTON, MASSACHUSETTS  
MAY 28, 1967



Ground floor plan (left) and typical upper floor plan (right) of the new Senior House now being completed as an important addition to the Institute's dormitory facilities for students. In an attempt to provide as many rooms as possible with a view along the Charles River and toward metropolitan Boston, a serpentine effect, deviating from traditional architecture, has been adopted. It is expected that rooms will be available for occupancy by 362 seniors by the beginning of the spring term, although the dining room and certain other service facilities may not be completed until the summer.





M.I.T. Photo

*The Rockwell Athletic Cage provides a well-lighted and heated area 165 by 200 by 30 feet for student use for indoor athletic events. The cage is divided in the center to make two areas, each with a floor space of 100 by 165 feet. In the near half is a one-twelfth mile track, shot put circle, and pits for broad and high jumping. In the distant half, which is caged in, are facilities for indoor baseball, soccer, volley ball, badminton, and golf driving, through the use of nets or cages which may be quickly strung up or removed.*

recreational fields, the cage is well lighted throughout the day by natural light. For late afternoon or evening use, there are 83 direct-lighting fixtures of 1,000 watts each which provide diffuse and even illumination of 20- to 25-foot candles at all portions of the cage.

The floor or deck of the cage is a mixture of clay and loam, an approved material for cage or field purposes. When necessary, the temperature of the cage may be kept to 60 degrees F. by means of six hot-water coils and electric fans which circulate warm air from units affixed to the ceiling. The boiler room is adjacent to the cage on the east side.

The cage is connected to Briggs Field House where lockers and showers are installed; it will also be connected with the Massachusetts State Armory of the National Guard. The Armory is used in the Institute's Reserve Officers' Training Corps program, and the Briggs Field House provides headquarters, dressing rooms, showers, and similar facilities for students taking part in activities on the athletic field. At present, there are no lockers in the Rockwell Cage, although plans are under way for lockers to be installed between the cage and the Briggs Field House.

The eastern half of the cage is enclosed with rope and twine netting, providing suitable indoor space for soccer, lacrosse, baseball, softball, badminton, volley ball, golf practice, and similar sports. As shown on the floor plan (page 30), a standard size (infield) baseball diamond with a portable wire net batting cage may be set up in the northeast corner of the cage, while a 12 by 20 foot wire net cage for golf-driving practice is located in another corner of the east half of the cage. The golf cage is portable and, being supported from the ceiling by lines and pulleys, can be lifted up, out of the way when not in use. Portable nets, which may be quickly put into place, or removed when not needed, are also provided for intramural and student competition in badminton and volley ball.

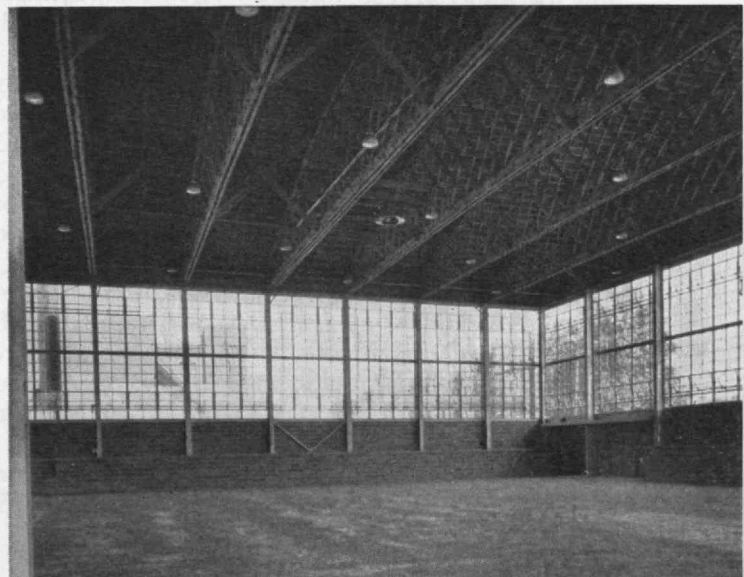
The southern half of the cage contains a one-twelfth mile indoor cinder track, a combination pole-vaulting and broad-jumping pit of regulation width (but longer than standard pits), a standard high-jump pit, and a shot put circle.

In the athletic field adjacent to the Rockwell Cage and Briggs Field House, additional areas are being loamed and seeded. Approximately 300,000 square feet of playable areas are being added to recreational space on Briggs Field by leveling, loaming, and seeding the area at the new entrance to Briggs Field on Massachusetts Avenue, as well as the areas adjacent to the new tennis courts and along the driveway at the rear of the new Senior House. These new athletic improvements are particularly convenient for residents of Westgate, Westgate West, and the new Senior House — all of which border on Briggs Field.

Throughout its construction, flexibility of use for

*Interior view of the Rockwell Athletic Cage showing beam construction. This photograph, looking toward the main buildings of the Institute, was made prior to the installation of the twine and wire netting which encloses this half of the cage.*

M.I.T. Photo



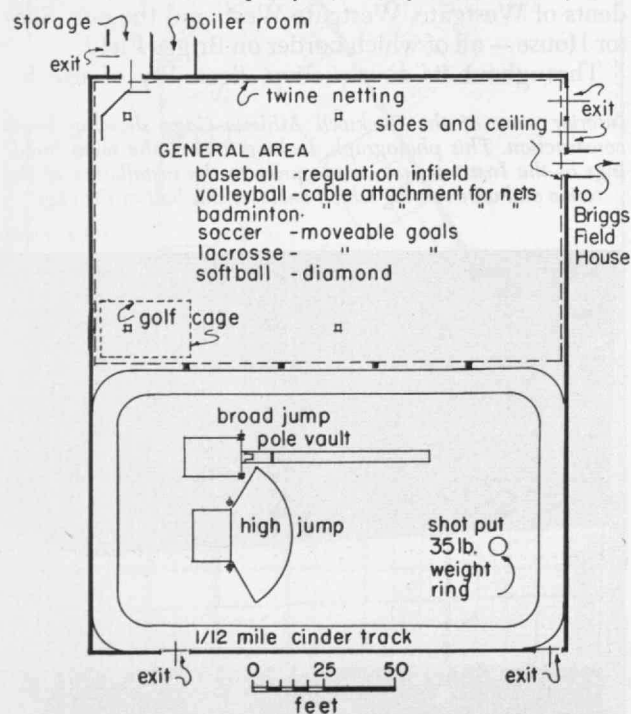
student athletics has been the keynote in constructing the Rockwell Athletic Cage. There are no bleachers or grandstand seats in this unit, since M. I. T.'s athletic program has always emphasized the development of physical fitness of the individual rather than grandstand specularity or the development of individual athletic stars. Although the cage is primarily a much needed addition to the Institute's athletic facilities, its flexible construction makes it well suited to other uses, on occasions. The Rockwell Cage will serve for student rallies, and will be put to good use for Field Day activities in the event of inclement weather. It is also available for future luncheons on Alumni Day, should the wet weather of the last two years usher in a new precedent.

### Looking Ahead

The units which have been described will bring the reader up to date on recent construction, including buildings which are within a few months of completion. But there are other buildings under construction and still others projected, about which Review readers will wish to be informed. The Review will bring a running account as these are planned, completed, and dedicated. At the same time, a preview of things to come may not be amiss.

Foremost of the units to be completed in the reasonably near future is the Charles Hayden Memorial Library, described by Dean Burchard in the November, 1946, issue of The Review. This magnificent library is now under construction between Walker Memorial and Building 2 of the main academic group; it will connect these two units. Caisson foundations have been completed, and, at the time of writing, the concrete for the bottom floor is rapidly being laid. The new Hayden Memorial Library will serve as the academic and recreational library for the

*Floor plan of the Rockwell Athletic Cage, indicating the possible uses to which it may be put for competitive indoor sports.*



M.I.T. Illustration Service

Institute's student body, Faculty, and staff. In addition, it will contain administrative offices for the Division of Humanities, and will also contain music and sound-film rooms as adjuncts to modern education. It is expected that this unit will be ready for use in another two years.

As announced on page 41, a new electrostatic generator is now under construction. Many of the parts of the generator are under construction in the shops of the Laboratory for Nuclear Science and Engineering, and the building to enclose it is expected to be ready by next spring. The building which will house the generator was designed by Professors Lawrence B. Anderson, '30, and Herbert L. Beckwith, '26, both members of the Faculty of the Institute's School of Architecture, and is an example of collaboration between the Laboratory for Nuclear Science and Engineering and the architects, as well as various departments and special consulting groups at the Institute, including the soil mechanics division of the Department of Civil and Sanitary Engineering, the Institute's Lighting Committee, and many others. The Sawyer Construction Company will build the new structure for M.I.T.

The generator proper will be contained in a steel tank slightly more than 12 feet in diameter and approximately 32 feet high, the total weight of which will be 93 tons. The weight of the insulating gas within the tank is 10 tons. The machine will be shielded by a cylindrical concrete silo two feet thick and separated from the generator by an air space of three feet. Beneath the generator will be a laboratory 40 by 50 feet with walls two feet thick to provide ample shielding against stray radiation.

The upper section of the building is in the form of a tower connected to a bridge which will give access to the interior of the generator and will be equipped with a crane capable of removing the 17-ton cover and parts of the machine. Access to the bridge is by elevator and stairs in the tower. A machine room will house accessory equipment, compressor motor, generator and batteries. Other facilities will include a control room, darkroom, and office. The building is principally heated by forced warm air with a fan room in the tower. By use of special controls it will be possible to divert the full ventilating capacity of the building into the laboratory for a complete change of air in approximately three minutes. A special lighting system, by means of a luminous ceiling and some indirect fluorescent units, has been designed for the new building. The structure will be built of reinforced concrete for the laboratory room and silo. The tower and bridge sections will be steel-framed and covered with corrugated asbestos, while the shop- and office-wing walls are to be built of masonry faced with the light-colored brick used in other Institute buildings.

On Memorial Drive at Amesbury Street, at the west end of Institute property, a building for the new supersonic wind tunnel has been erected. The offices, classrooms, and general facilities have been completed, but the wind tunnel is still to be built.

Projected also is a towing tank and hydrodynamics laboratory to be located on Vassar Street at Main

(Concluded on page 76)



# Technical Publishing Today

*Unprecedented Demand for Literature on American Technology  
Can Be Fulfilled Only by Exploring Every Advance  
which Reduces Cost of Book Manufacture*

By JAMES S. THOMPSON

**S**PEAKING of his experiments with electricity, Benjamin Franklin once said: "Before long, Sir, we shall run printing presses with this fluid, and light our houses, and talk around the world. . . ." The factual establishment of these once fanciful seeming predictions occurred long ago. But technology has entered the stage of ever increasing refinements, and continually holds forth the promise of new predictions equally fanciful. Recently in the Huebner Laboratory in New York a group of men assembled to watch an electrically operated printing machine of a new sort. Properly speaking, it was not a press, for with its use the age-old method of printing by pressure was eliminated. Ink was transferred from type face to paper not by direct contact between paper and inked roller but by electricity — by the electrostatic forces which Franklin studied two centuries ago.

The publisher of technical books watches the work of the chemists as they strive to make better paper more cheaply and as they experiment to perfect the colors of those war-born inks that dry instantly upon contact with paper and yet do not dry and cake on the rolls. Throughout the long strike of newspaper printers in Chicago, publishers of books also carefully observed the results of the extensive use of the Varitype, a machine designed to compose and justify copy quickly, easily, and inexpensively, and closer akin to the simple typewriter than to the intricate Linotype and Monotype machines.

In the light of advancing costs and of ever increasing specialization along the technological front, the publisher of technical literature is reassaying his own techniques. All technological advances in printing, in paper and ink manufacturing, in bindings, in distribution, in methods of illustration, and the other mechanics of production of technical books are currently of especial interest to him.

Although, of course, he does not expect radical results at once, the book publisher waits with great hopefulness upon the findings that will emerge from the research programs having direct application to his field. One such program is now going forward at M.I.T. with the aid of a \$100,000 grant made by the Carnegie Corporation to advance scientific aids to learning. That the Carnegie Corporation should establish so large a grant for the study was indeed recognition from a high place of the increasingly serious problem that faces all branches of the publishing industry and, in particular, the publisher of technical and scientific books.

The technical book publisher is faced with fixed traditions as to book prices on the part of his readers, while the high degree of technical specialization

which characterizes modern science, research, and engineering calls for more volumes of limited edition. Both of these trends, plus the high prices that rising costs make necessary, may make it impractical for him to publish volumes that are of unquestionable worth but that are, perhaps, addressed to the leaders in some area of knowledge and so have no prospect of a large sale.

## *Engineers and Artillerymen*

The technical book publisher has, of course, heard the currently fashionable argument that the postwar dollar is only a midget when compared to the prewar dollar. The inflationary trend he must accept for what it is, and often he is forced to ask for two dollars where formerly he asked for one. But his experience causes him to question whether this is an argument that is fundamentally sound over long periods of time. He believes that it is not appropriate for management to accept so marked an economic change in a spirit of casual complacency. When costs double, it is the role of management to explore every technological device that may cut them down. Taking aim at costs, and recalling that it was Napoleon's judgment that "engineers are more clever than artillerymen," that section of the publishing industry devoted to technical and scientific reading is peculiarly conscious of its good fortune that members of the M.I.T. Faculty are at work on the same range.

My contact with the Institute and its staff is based upon a series of annual visits to M.I.T. that have extended over decades. With my friend and fellow publisher, Edward P. Hamilton, President of John Wiley and Sons, Inc., I have engaged in friendly competition for a long generation as we sought in Cambridge the manuscripts that have become tools of education and of practice throughout the world.

Yet before us were the elders, I wonder how many general publishers could match the magnificent record of service that has been established by *Railroad Curves and Earthwork* — a text by the late Professor C. Frank Allen, '72. First copyrighted in 1889 that text sold in greater quantities in the year 1947 than in any previous year of its long life. In the course of an exchange of letters regarding contract provisions affecting the future of his book, Professor Allen (who had then just passed his 96th birthday) exhibited the same vigorous, precise capacity for detail that I remembered as so characteristic of him when we met during my first visit to M.I.T. in 1910.

Another work that seems destined for an infinity of use is the *Textbook of Ore Dressing* by the late Robert H. Richards, '68, sponsored by the late Professor

Charles E. Locke, '96. This also was recently the subject of active correspondence. Revised by Professor Locke in 1940, it continues to be the standard text in many mining colleges, and it is consulted as an authoritative work of reference in many countries.

### *Hazards of Specialized Volumes*

But these elders did their work for a relatively large group of technical readers. By means of mass-production methods it is possible to print and distribute, economically, books for which the demand is large. Increased costs of production are modifying the economics of technical publishing to a certain degree. At the same time the publisher is keenly aware of his responsibility to cater to the needs of smaller and more highly specialized groups in advancing technological progress. Formerly, it was feasible, for example, to publish a book, priced at one cent per page, so long as at least 2,000 or 3,000 copies could be sold over a period of a few years. It was also possible to reprint such books in a quantity of only 250 copies. Today, even though we may set the price at a higher level, 750 copies should be the minimum reprint order to be economically feasible. The economic problem is particularly severe in the case of the highly specialized book or research monograph whose intrinsic value may bear no relation to cost of publication. Such volumes are the most eligible victims of increased costs. That this condition may abort some valuable books is, of course, a source of worry for the technical publisher. Yet, like all entrepreneurs, he is ready to gamble when he must, and although he may curse costs, it is his private resolution that if a manuscript is of sufficient worth he will publish it for however specialized an audience. Although this resolution grows out of a conscientious appreciation of his function, it is backed by a recognition that in all likelihood the pressure of events in science and technology will not permit a reduction in the output of technical books. In fact, just the reverse is true.

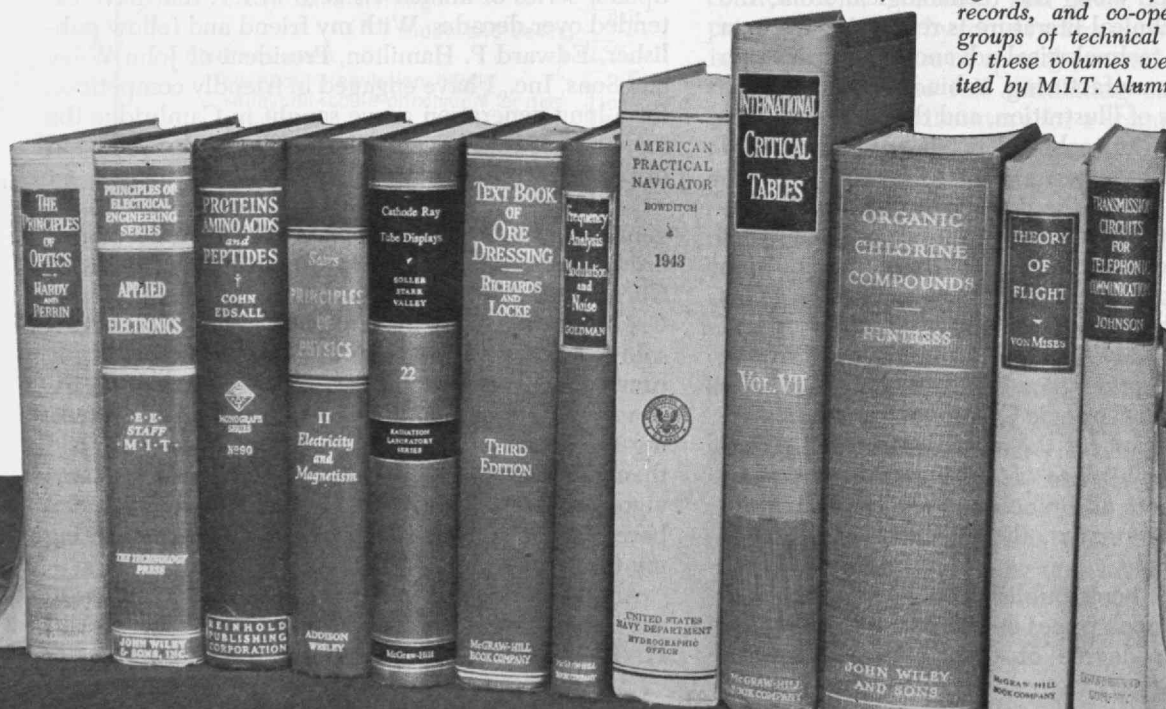
Last year I spent four months in Europe and in Latin America investigating international technical publishing activities. The trip provided an excellent and unusual privilege to examine the great demand that exists for technical publications produced in the United States, and to observe, at first hand, the need on the part of American publishers to employ each and every possible technological advance in enabling foreign scientists and engineers to build up, or rebuild, the natural resources and industries of their native lands, many of which have suffered the ravages of war. The demand for books which make available to our foreign friends the scientific and technical knowledge gained in this country during World War II is extreme and pressing. In each of the 11 United States Information Libraries in Europe, representing outposts of our culture, which I visited, there was an impressive demand for technical books and magazines from the U. S. The need is equally great in Latin America.

### *American Science in Demand*

Our records show that we are exporting more technical books than ever before and there is an increased demand for the foreign language rights of American books. Last year one publishing house exported approximately seven times as many volumes as it had exported in the normal prewar year. In recent years the foreign language rights of about 350 United States technical books have been sold, the right to translate in Spanish being the best seller.

That there is a great interest throughout the world for the methods and results of American science and engineering supports us as we make our decisions on what to print. At the same time the experience of our technical book-publishing colleagues in the Argentine holds a note of warning that the concept of the midget dollar has its shortcomings. In December, 1947, production and operating costs had gone so high, and markets had shrunk so much, as a consequence, that some technical publishers had been forced to curtail

*A group of technical volumes, of different publishers, representing book series, private experience records, and co-operative efforts of groups of technical personnel. Many of these volumes were written or edited by M.I.T. Alumni and Faculty.*



M.I.T. Photo



programs. Except for the reprint of sure-fire commercial successes, technical publishing in general had been appreciably diminished.

At the present time Argentina is engaged in a five-year plan of national industrialization, and engineers from the United States have assisted in the development of this program. In discussions with Argentine Government officials, who are concerned with the organization of a large number of industrial schools, and also with capitalizing a large appropriation for the production of technical books in Spanish, a plan emerged by which technical book publishers in the United States would collaborate with Argentine publishers in making available Spanish editions of books published in this country. At the present time a professional committee in New York, organized by a group of technical publishers, is awaiting the complete agenda in order to prepare appropriate bibliographies. Aided by the government guarantees, the Argentine publishers should be able to produce Spanish editions of a large list of United States technical books.

Our ambassador to Argentina, James Bruce, has written as follows regarding this plan:

Your representative in Buenos Aires has discussed with me your project for having certain American books translated into Spanish for use in the Argentine. I think this project is one of the most useful things we can do and that it will make a real contribution to better understanding between the people of Argentina and the people of the United States.

As you know, German immigration into Argentina resulted in a large German population here and as a result of intermarriage there are many Argentines of German descent. During a long period of years and during the recent world war German influence among the armed forces and also in the Government was very strong. The defeat of the Axis powers brought disillusionment concerning German power and a natural decline of German prestige here. We are convinced that, on the whole, the armed forces of Argentina are now friendly toward the United States and that our influence is steadily on the increase. I know of nothing which would make a more lasting contribution to this trend than the use of translations of technical books by people in the army and in the Government. It is true that Nazi influence here was strong at one time and there no doubt remain some vestiges of this influence. However, the trend is definitely away from it. . . . I am convinced that we are now on the right track and the majority of the people in the Government feel that co-operation with the United States is desirable and in fact is indispensable for the future development of Argentina.

Let us hope that economic conditions in the United States will never make necessary Federal subsidies for the publication of required text and reference books. But such a hope can be realized only when every avenue of technological progress is employed economically. When, in Franklin's day, members of a college faculty wanted to put into print their theories of comets and the transit of Venus, they had their text and diagrams published in a newspaper. From this elementary beginning our industry has made its own way, and it has come far.

### ***Origin of American Publishing***

Of course our early ties in publishing are with the British, and the story of Nathaniel Bowditch well illus-

trates how American publishing had its early roots in foreign lands. Living most modestly hereabouts, in the Colonial period, becoming an authority in mathematics and navigation, he found grave errors in the classic English book on navigation which had been the Bible of the world's seafarers since 1770. Bowditch's revision in 1801 revolutionized practice, and today after 147 years, now published by the United States Hydrographic Office, it continues in use throughout the world, an example of precise workmanship and utility in literature.

During the late Eighteenth and early Nineteenth Centuries, there was a steady flow of descriptive pamphlets on equipment, and booklets on such subjects as canal, bridge, and highway location. Typical was the booklet on the Pennsylvania fireplace, by the great philosopher, kite-flying discoverer of electricity, one-time ambassador to France — Benjamin Franklin.

The industrial revolution in 1820 and war influenced the beginnings of technical publishing in the United States as they do the expansion today. Although the publication of technical books in the United States dates as far back as 1807, it was not until the Civil War period that the real momentum developed in the publication of technical volumes in the United States.

### ***Three Major Contributions***

At the present time three important operations in technical publishing are exceedingly effective in bringing to the scientist and engineer the valuable results of his technical colleagues. I refer, first, of course, to the development of book series, private experience records, and the co-operative efforts of groups of technical personnel.

As among European publishers — the Cambridge Press, for example — nearly all technical publishers in the United States have distinctive series of books in their respective programs, nearly all of which have been developed since World War I. In many cases, Alumni, as well as members of the Faculty of M.I.T., have contributed to this worthwhile program. For example, the M.I.T. Electrical Engineering Series, produced jointly by John Wiley and Sons, Inc. and the Technology Press; the Bell Telephone Laboratory Series in communications by D. Van Nostrand Company, Inc.; the American Chemical Society monograph series by Reinhold Publishing Corporation are excellent examples of a group of co-ordinated books on a single broad topic. Three important McGraw-Hill Book Company, Inc. series have close connections with M.I.T. personnel: The International Series in Physics was projected first from a consultation with President Compton when he was teaching physics at Princeton. The Radio Communication Series, under the consulting editorship of B. Dudley, '35, editor of *The Review*, was started when he was managing editor of *Electronics*. The new Series in Aeronautical Sciences has, as editor in chief, Jerome C. Hunsaker, '12, internationally famous head of the M.I.T. Department of Aeronautical Engineering.

Unique in technical publishing development here, in the second place, has been the success in persuad-

*(Concluded on page 72)*

# A NEW EXPERIMENT IN International Relations

*Sixty-two European Students in Science and Engineering  
Spend the Summer Studying at the Institute and  
Becoming Acquainted with American Ways*

By DONALD J. EBERLY

OF the student body now studying at M.I.T., many have seen, and perhaps participated in, the destruction in Europe during World War II. The devastating impressions thus gained are lasting ones, not easily blotted out from one's mind. They are dark spots in our memories which might best be forgotten. And yet, sometimes such impressions also serve to awaken new concepts, to create an awareness of obligations to others, or to act as a spur toward the better, freer life for which the war itself was fought.

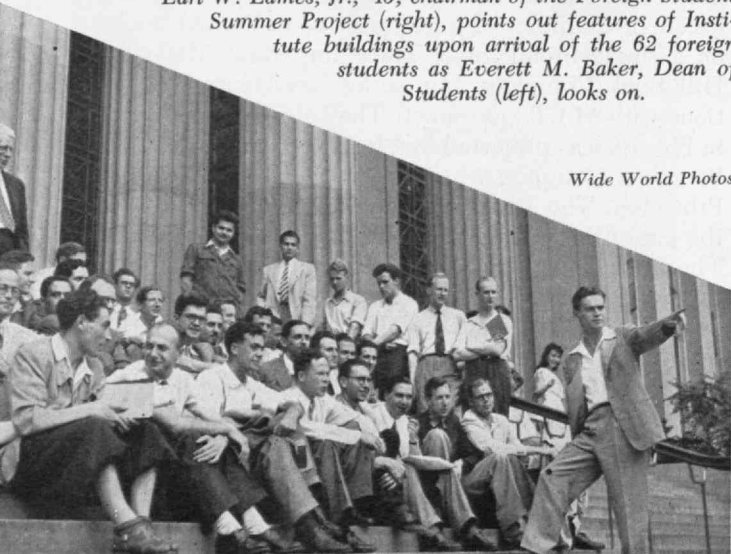
It came as a natural idea, therefore, that students should be able to play their part in the educational reconstruction and rehabilitation of Europe. A year ago this topic was one of current interest among students at M.I.T. and was formally discussed by members of the National Student Association\* Committee at M.I.T. in May, 1947. As a result of these discussions, it was decided that there would be merit in inviting a number of European students of science and engineering to study at M.I.T. during the summer of 1948.

The original idea, which has been closely followed, was to make available to a selected group of foreign students a summer session of study at M.I.T. in the field of the student's own choice, to give our guests an opportunity to study living conditions, points of view, and the economic, social, and political life of people in the United States; to give them an opportunity to meet other European students in science and engineering; and, above all, to make such a program avail-

\* The National Student Association Committee is a student managed organization dedicated to the welfare of college students. More than 200 colleges and universities throughout the country, and representing approximately 750,000 students, are members of the N.S.A.

*Earl W. Eames, Jr., '49, chairman of the Foreign Student Summer Project (right), points out features of Institute buildings upon arrival of the 62 foreign students as Everett M. Baker, Dean of Students (left), looks on.*

Wide World Photos



able without cost to our guests. There were to be as few restrictions as possible attached to the selection of participating students, but it was evident that facility in the English language and a certain degree of maturity would be necessary. Otherwise, so far as possible, students were to be selected, roughly, in accordance with the degree of devastation which their native lands had suffered during World War II. To a very large extent the program was initiated and sponsored by Earl W. Eames, Jr., '49, at the time a junior student taking courses in chemical engineering as well as in business administration and who has served, from the beginning as chairman of the project.

Obviously, such a program was far beyond the capabilities of a group of Technology students working alone; even from the first, it was evident that much assistance would be required for the successful execution of this objective. After giving careful consideration to the plan, we presented our idea to the Constitutional Convention of the National Student Association, during the summer vacation period, and obtained unanimous support. When we returned to school in September, 1947, we went to President Compton and presented our plan to him, asking for his help in bringing a maximum of 80 students to M.I.T. for the summer. He was immediately enthusiastic and offered his complete co-operation; at the same time telling us that since this was a student project, he felt it should be organized and run by students. The Foreign Student Summer Project, as our plan was called, has always remained a student project, although the utmost co-operation and assistance from Administration and Faculty were promptly forthcoming whenever such help was requested. Dr. Compton told us he would place our plan before the Executive Committee of the Corporation with the request that it waive the tuition payment for 80 students as listeners, rather than as regularly enrolled students at M.I.T. This request was soon granted and, by greatly reducing expenses, was an important factor in making the project possible.

We next approached the fraternities to see if they would house the foreign students. All of the fraternities remaining open during the summer agreed to accommodate foreign students rent free; and another hurdle, that of housing, was successfully passed.

By November 1, a committee of 20 began consideration of the real problems involved in the project — and they were many. Funds had to be raised for the transportation, feeding, and incidental expenses of



our visitors, and there would be unavoidable expenses in administering such a program. Plans for publicizing the project would need to be worked out. Arrangements would have to be made for visas and other legal documents, and the general health and well-being of our guests would also require attention. We found out later that a host of other problems would arise as well.

The first problem to be settled was the criteria to be used in selecting students who would participate in the program, making sure that there would be no serious limitations because of language differences. It was decided to invite 80 graduate students in science and engineering from all war-devastated European countries, whether former enemy or ally, and without regard to students' politics, religion, or race. The students would have to possess good knowledge of English, and would be chosen on the basis of academic record, extracurricular activities, and ability to benefit from graduate study or participate in research at M.I.T. An upper age limit of 35 years was also established, to assure that participants would profit from their summer study for many years to come.

The original screening of applicants posed a problem which we discussed with personnel of the State Department's Division of International Exchange of Persons. The cultural attachés, through the State Department, were able to offer some assistance, and additional aid was obtained through National Committees of the International Student Service† working through the World Student Service Fund. These groups agreed to screen all applications to eliminate those who would not best be able to benefit from our program, passing on to us, for final selection, the applications of the most worthy.

The selection of the students overseas was a large problem which was solved to our satisfaction.

† The International Student Service, with principal offices in Geneva, Switzerland, co-ordinates and aids in programs of relief, reconstruction, study and travel for students all over the world. The World Student Service Fund is the United States Committee of I.S.S.

Through the co-operation of the International Student Service and the Division of the International Exchange of Persons of the United States Department of State, screening committees were set up in most of the countries concerned, to distribute information and applications, to interview and screen all of the applicants, and to send the completed applications, together with recommendations to our final selection committee at M.I.T. An excellent selection procedure was carried out in this way. The work of preliminary screening is very much appreciated, since originally there were more than 7,000 applicants. Our final selection was made from 500 applicants, from which 62 students were chosen to come to M.I.T. Final selection was made by members of the Foreign Student Summer Project Committee with the valuable advice and assistance of Paul M. Chalmers, adviser to foreign students at M.I.T., and other members of the Registrar's Office and the Administration.

About February 1, 1948, after considerable support of the project had developed in M.I.T. circles, two members of the committee visited Washington. The M.I.T. Foreign Student Summer Project was explained in detail to diplomatic representatives of Belgium, Bulgaria, Czechoslovakia, Denmark, Finland, France, Great Britain, Greece, Hungary, Italy, Luxembourg, the Netherlands, Norway, Poland, Rumania, Russia, and Yugoslavia. The Civil Affairs Division of the War Department was consulted regarding students from Germany and Austria.

While our selection procedure and our contact with the governments were going on, we were also busy on our fund raising. Our initial budget was set at \$25,000; later it was revised upwards to \$30,000. This amount covered food, books, equipment, insurance, haircuts, laundry, dry cleaning, and incidentals, plus certain transportation costs which the students' own governments did not assume, and transportation within the United States.

The project was announced to the press on March 1 and immediately received excellent support. The project was one which stirred peoples' imaginations,

*Dr. James R. Kilian, Jr., '26, conducts a discussion group and acquaints European summer students with M.I.T. objectives. Seated, rear right, are: George R. Harrison, Dean of Science; Nathaniel McL. Sage, '13, Director of the Division of Industrial Cooperation; and Everett M. Baker, Dean of Students.*



Wide World Photos

not only because of the unusual opportunity afforded a select group of European students, to become acquainted with educational and other conditions in the United States, but also because the Foreign Student Summer Project was conceived and managed by M.I.T. students. From such publicity as was received, there came many offers to aid in our Foreign Student Summer Project.

Applications arrived from foreign countries as early as April. The 62 students selected to attend the project at M.I.T. this summer came from 15 countries as follows: six from Finland, two from Sweden, five from Norway, four from Denmark, four from Belgium, five from the Netherlands, four from Great Britain, eight from France, one from Germany, one from Austria, eight from Italy, one from Bulgaria, three from Czechoslovakia, six from Poland, and four from Greece. Although invitations were extended to students in Hungary, Luxembourg, Rumania, Russia, and Yugoslavia, there were no students representing these nations in the summer project.

As the time approached for students to arrive in this country, it became necessary to make suitable provisions for their reception. This was not always easy, because students arrived at various periods between June 2 and June 23, and came by various routes. However, it was realized that first impressions are always important, and therefore great pains were taken to organize and co-ordinate the students' activities upon their arrival. Members of the committee met the students and had living quarters arranged for them in New York, usually with the help of the consuls or their diplomatic officials. Organized group activities were planned — tours of New York, trips to the United Nations Headquarters, and so on — and the students remained in New York until a reception for them was given at the Waldorf-Astoria on June 16. There they met many of the ambassadors, ministers, and other officials, after which they immediately came to Cambridge to begin their courses of study.

Upon their arrival in Cambridge, the students were interviewed in a special registration procedure by Professor Chalmers, and the project chairman. The purpose of such interviews was to determine what studies the student might best profit from during his three months' stay at M.I.T. In some cases it was not possible to permit the student to follow studies of his choice, since a full academic program is not in operation at M.I.T. during the summer months. In other cases, it became evident that the student's unfamiliarity with the Institute and educational practices in the United States necessitated a revision of his original judgment of studies he wished to follow.

As might be expected, most of the students were shy and a bit strange, at first, but our committee made every effort to show hospitality and gradually our guests came to know one another as well as they knew us. During the summer we often heard it said that this project afforded the first opportunity many of them had had to know other European students in science and engineering.

Once the foreign students began their studies and were comfortably housed in Cambridge, the months of long and arduous planning and preparation began to yield rich dividends.

We cannot overemphasize the consideration we gave the living arrangements of the students. Our purpose in bringing them to the United States was not only to acquaint them with our technical activities, but to have them meet other students. We felt that a good way to accomplish this was to house them in fraternities. Each fraternity which housed more than four students always had one from northern, eastern, southern, and western Europe. At no time were there two or more students from the same country living in the same fraternity house. Whenever possible we tried, however, to fulfill the request of fraternities for specific students. The only young lady participating in the project was housed in the Women's Dormitory.

### *International Exchange*

By intermixing the students, many Americans learned new facts about the European countries, while the Europeans gained firsthand information about the United States. During the Republican Convention, one of the fraternities invited all the students to watch the proceedings over its television set. One of the American students made a brief talk and answered many questions regarding the political system in the United States. From all comments it is clear that the living conditions and arrangements have been most pleasant for both foreign guests and American hosts.

An important aspect of the Foreign Student Summer Project was to acquaint foreign students with American customs and points of view, and to provide them with opportunities to become acquainted with the economic, political, and educational system of the United States. Toward this end there were organized a program of evening lectures, seminars, trips to various manufacturing plants, field trips, picnics, and weekend visits to homes of members of the M.I.T. Faculty and staff. In several cases our guests had invitations from persons having large estates who were anxious to proffer hospitality. For the most part, however, effort was made to enable the students to become acquainted with groups in the middle economic stratum.

Special meetings were arranged in which the students could exchange ideas with their professors about anything from the applications of weather-radar to international relations and the control of atomic energy. A special course in English, by reading and discussion, was also organized.

Twice a month, as part of the seminar series, an information program was held. At each meeting five leading authorities in various fields were invited to answer the students' questions on matters of history, current political thought, States' rights, the role of labor unions, and similar topics.

It appears that the program of hospitality and extra-curricular activities which had been planned was such as to keep the foreign students going at a more active pace than is customarily followed by regular students at M.I.T. In fact, some of the students commented that their social and study program left them little time for sleep — and yet there was so much to pack into the 14 weeks during which they would be guests.

Nor were the health aspects of our foreign guests neglected any more than their academic needs. Realizing that we would have to assume liability for acci-

*(Continued on page 64)*



# THE INSTITUTE GAZETTE

PREPARED IN COLLABORATION WITH THE TECHNOLOGY NEWS SERVICE

## **Charles E. Locke: 1874–1948**

**P**ROFESSOR Charles E. Locke, '96, a member of the Institute's staff for 40 years before his retirement in 1941 with the rank of professor emeritus and honorary lecturer in the Department of Metallurgy, died on September 24 in the Homberg Infirmary after an illness which had its origin several years ago. He had served as secretary of the Technology Alumni Association since 1930, and his activities in this field brought him into contact with Technology graduates throughout the world.

A native of Milton, N.H., where he was born on August 29, 1874, Professor Locke later moved with his family to Portsmouth where he received his early education in preparation for entering M.I.T. A year after his graduation from the Institute in 1896, Professor Locke was engaged by the late Professor Robert H. Richards, '68, then head of the Department of Mining and Metallurgy, to assist in the preparation of a book on ore processing. This association led to a lifelong friendship during which Professor Richards and Professor Locke collaborated on many projects that had a wide influence on mining methods.

In 1901 Professor Locke was appointed a member of the Institute's instructing staff, and in addition to teaching, he traveled widely to keep in close touch with the progress of his former students and to add to his knowledge of developments in mining operations. He expanded the Institute's courses founded by Professor Richards and made important contributions to methods of processing ores. He was appointed assistant professor in 1906, associate professor in 1919, and was given the rank of full professor in 1930. From 1939 to 1940, Professor Locke was acting head of the Department of Mining and Metallurgy, which later became the Department of Metallurgy.

In connection with his professional career as an authority on ore dressing and mining engineering, Professor Locke was frequently called on for consultation and visited nearly every state in the United States, as well as Canada, Newfoundland, Mexico, Japan, and Korea. The hospitality shown him on these trips was an evidence of the regard in which he was held by a host of friends. Wherever mining engineers are found—from Alaska to the Andes and west to the African gold fields—Professor Locke was known as an admirable teacher and an outstanding engineer. Early in his career Professor Locke was of great assistance to Professor Richards in preparing the latter's four-volume treatise on ore dressing, and was responsible for a major portion of the work on the subsequent *Textbook of Ore Dressing* which came out under the authorship of Professor Richards and Locke.

In addition to his coauthorship with Professor Richards, of a textbook on ore dressing, Professor Locke contributed numerous technical papers on mining



M.I.T. Photo

### **CHARLES E. LOCKE, '96**

*Secretary — M.I.T. Alumni Association, 1930–1948*

subjects in the technical journals of his field. For more than 35 years before his retirement he had written an annual comprehensive review of progress in ore dressing and coal preparation, and these annual reports were regarded as outstanding.

Until about 1914 the Department of Mining and Metallurgy for many years held an optional traveling summer school with trips which extended to Pittsburgh, Duluth, or Nova Scotia with emphasis on mining or metallurgy, alternating from year to year. Professor Locke usually laid out the itinerary and arranged the details. During the trip he looked after the needs of the students and was an important factor in making the trip successful. At the end of the trip he had every student for a warm friend.

The outstanding characteristic of "Charlie" Locke, as he was affectionately known to M.I.T. Alumni, was undoubtedly his capacity for making friends by taking a real interest in the men with whom he came in contact. The special beneficiaries of this interest were the students in Mining and Metallurgy at M.I.T. He had

a personal file of Course III graduates which he tried to keep up to date. In this way he could tell visitors just what their classmates were doing. Over a long period of years Professor Locke made it a practice to write a letter to each Course III graduate after he had secured his first job, make helpful suggestions, bring him up to date on M.I.T. affairs, and ask him to write any time he needed help. A large number of men took advantage of this friendly gesture, and warm friendships developed from them. When Locke became secretary of the Alumni Association the same interest was spread over the whole alumni body. His letters were never short, perfunctory things but radiated a real desire on his own part and in behalf of the Alumni Association to be of direct help to all Technology men.

One of the outstanding monuments to Locke's capacity for management and detail is the present Alumni Council. Through a long succession of officers and committeemen the meetings of the Council have been well attended and a credit to the Association. Much of this success has been due to the work of Secretary Locke.

Of his associations with Technology Alumni, for which he is probably best known by most Alumni, he once modestly said:

I became secretary of the Class of 1896 in 1908, and have continued as secretary down to the present time. I had not been particularly active in Alumni affairs, having merely served occasionally on some committees. My real activity began in 1930 when I was made Alumni Secretary. My work in this office has been primarily that of corresponding and recording secretary, because as I was working only part time I could not possibly spend time travelling to make personal visits to Alumni clubs. These visits have been limited to such groups as were within easy reaching distance of Boston, or to such groups as might be along my routes whenever I was making a professional trip. I have seen the Alumni Association grow in numbers and in activity. Changes have been gradual, but in looking back since 1930 one is surprised to find the progress that has been made in Alumni affairs and activities.

Professor Locke was a member of the American Institute of Mining and Metallurgical Engineers and a charter member of the Boston Section. He believed that all students in mining and metallurgy should join this organization as student members and continue as regular members. He took on himself the task of informing the student body regarding this professional society, and then approached each, individually, regarding joining. In this, as in everything he did, the work was not considered completed until the last detail was checked off and each student who had decided to join had filled out his application and forwarded it to headquarters. He also did all he could to stimulate and advise officers of the student professional society in their activities.

Professor Locke usually reached his office soon after 8:00 A.M., and until within a few years stayed until 5:00 P.M. or later. He usually took the month of August for a vacation but even then frequently reported at his desk several times. Because of these long hours, and disregard of normal academic vacation periods, visiting Alumni could usually find him in his office with a friendly greeting for them and willingness to chat on personal or general professional matters.

## ***Bread Upon the Water***

THAT the Institute Alumni are deeply loyal is so apparent as to be almost axiomatic. Occasionally, however, there arises an unsolicited example which demonstrates this loyalty so cogently that it merits special notice.

A former recipient of a Swope Fellowship, who prefers to remain anonymous, recently presented the Institute with a check for \$1,900 for a one-year graduate fellowship in electrical engineering. The donor felt he could best express appreciation for the year of graduate study he himself had received through the generosity of another, by thus providing for a year's graduate study under the freedom of a fellowship.

One's faith in human nature cannot but receive a lift when a relatively recent alumnus, still practicing his profession as a professional worker and not an entrepreneur, thus concretely and generously recognizes the help he himself has received. Editorially we may perhaps be pardoned for recalling the Biblical quotation in Luke 10:37.

## ***Student Insurance Plan***

WITH the opening of the school year on September 27, a student accident and sickness insurance plan, which supplements the services of the Medical Department, will go into effect at M.I.T. as announced by Dr. Dana L. Farnsworth, Medical Director of the Institute. The new program, which is designed to meet conditions prevailing in a university, is voluntary and protects the students at minimum cost against the possibility of expensive illnesses or injuries.

"The value of such a health and accident protection plan," said Dr. Farnsworth, "is indicated by the rising cost of medical care. Under this insurance program, accidents or illnesses, as well as major surgical operations, are covered and the limit of reimbursement is sufficiently high to offer students adequate protection in all except the most unusual cases. There is no limit on the number of separate illnesses or injuries for which reimbursement will be made."

The policies, for which more than 2,000 students have already applied, provide protection from a week before registration day until a week after the last examination of the term, and cover hospitalization and the services of physicians or surgeons and treatment in any recognized hospital. The new program is open to all students who are candidates for a degree, at a charge of \$8.00 per semester.

The plan covers hospital board and care at the Institute's Homberg Memorial Infirmary at the student rates or at a hospital at the rate of \$10.00 per day, including \$50.00 for specified services while a patient in a hospital. The policy also provides for charges for outpatient services. In case of need for surgical treatment, payments will be made at the rate of \$200.00 for an appendectomy and any corresponding amounts for treatment of fractures, dislocations, and other injuries. The maximum amount payable for operations arising from a single disability is \$300.00.

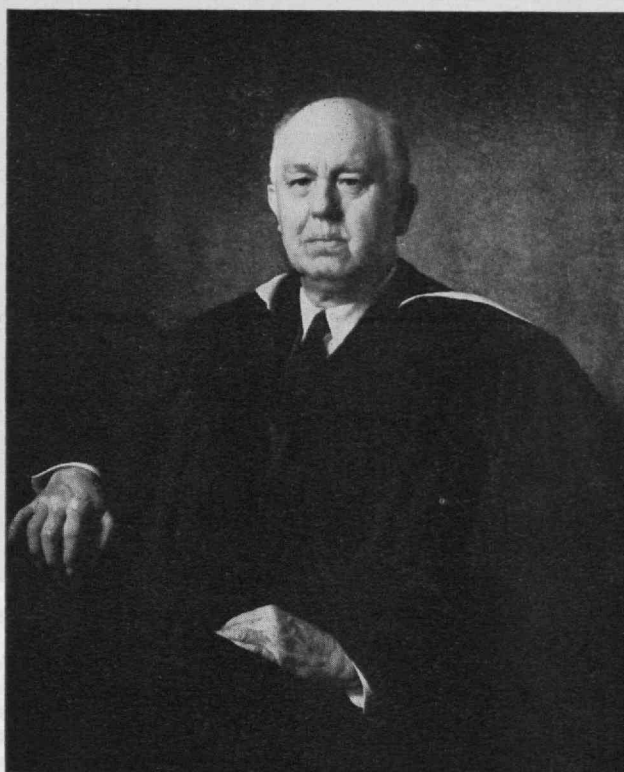
Medical attention will be provided under the new plan at the rate of \$4.00 per visit up to 25 visits. Provisions are also made for the services of specialists,



The Department of Metallurgy has recently been the recipient of a portrait of Robert S. Williams, '02, Professor Emeritus and Lecturer in Physical Metallurgy. The suggestion that associates and former students of Professor Williams might like to honor him and the Institute by having his portrait painted came from Samuel C. Prescott, '94, Professor Emeritus of Industrial Biology, and was received with hearty enthusiasm.

The portrait was painted by H. Bingham Ballou who succeeded in capturing an exceedingly good likeness of Dean Williams. Mr. Ballou also painted a portrait of Dr. Prescott several years ago which was presented to the Institute.

At the presentation, Dr. and Mrs. Compton, Dr. James R. Killian, Jr., '26, Dean Prescott, Edward L. Moreland, '07, Executive Vice-president, and many close friends and their wives



M.I.T. Photo

were present. Professor Victor O. Homerberg, '21, acted as master of ceremonies and called upon the late Charles E. Locke, '96, to make presentation on behalf of graduates of the Department of Metallurgy. Along with his comments at the unveiling, Professor Locke read a number of letters that had been received from various Institute Alumni in appreciation of the effective teaching and personal friendliness which they had enjoyed from Dr. Williams in student days.

Professor John Chipman accepted the portrait for the Department of Metallurgy and commented on the valuable contributions which Dean Williams had made in building up the Department. He then asked Dean Williams to step forward so that the visitors might have an opportunity to compare the portrait with the subject. The exercises were concluded by a tea arranged by secretaries of the Department.

in cases requiring consultation, and for dental services necessitated by accidents. The policy also provides for ambulance services. The total reimbursement for all sickness and accident services are covered to a total amount of \$500.00 for any illness or injury.

### Class of 9-48

AN informal ceremony for the presentation of degrees to the graduating class of September, 1948 (the last class to study under the accelerated program in effect during the war), was held in Walker Memorial on the afternoon of Friday, September 24, with Professor Ralph G. Hudson, '07, chairman of the Committee on Commencement. The invocation was delivered by Everett M. Baker, Dean of Students, and Karl T. Compton, President, addressed the candidates.

In his address, entitled "Maxwell's Demon," President Compton suggested that two immutable physical laws of nature — the principle of the conservation of energy and the second law of thermodynamics — had a corresponding counterpart in daily life. The social analogue was expressed by President Compton in the words: "Thou shalt not try to get something for nothing but thou shalt earn what thou desirest."

Assisted by John W. M. Bunker, Dean of the Graduate School, Dr. Compton presented degrees to more than 500 candidates. The ceremony was attended by members of the Corporation and Faculty, and the families and friends of the candidates.

### Faculty Appointments

APPOINTMENT of five new members to the Faculty at M.I.T. was announced during the summer by Dr. James R. Killian, Jr., '26.

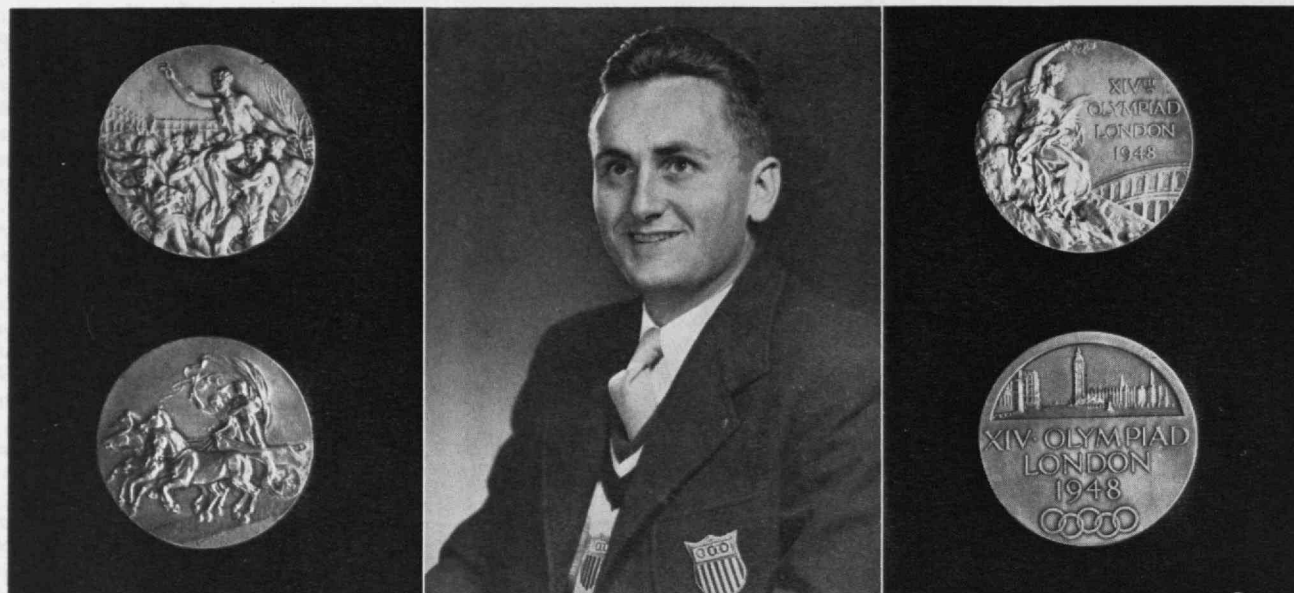
The five appointees are Charles P. Kindleberger, II, Alexandria, Va., to be associate professor in eco-

nomics; James N. Addoms, Dorchester, to be assistant professor in chemical engineering; Morris A. Adelman, Washington, D.C., to be assistant professor in economics; Alan S. Michaels, 2-46, Brookline, to be assistant professor in chemical engineering; and Lockhart B. Rogers, Oak Ridge, Tenn., to be assistant professor in chemistry.

Dr. Kindleberger, a native of New York, was born in 1910, and holds the degree of doctor of philosophy from Columbia University, awarded in 1937. He comes to M.I.T. from a post in the Department of State, Washington. He has previously served as economist with the Office of Strategic Services in Washington and London, the Board of Governors of the Federal Reserve System, the Bank for International Settlements in Basle, Switzerland, and the Federal Reserve Bank of New York. He is the author of a book on short-term international capital movements, as well as numerous articles, pamphlets, and book reviews.

James N. Addoms, a research associate in the Division of Industrial Cooperation at M.I.T. since 1946, received the bachelor of science degree from Haverford College, Pa., in 1942. Before coming to M.I.T. he was associated with the Explosives Research Laboratory of the National Defense Research Committee, Bruceton, Pa., and the Monsanto Chemical Company, Dayton, Ohio. He is a junior member of the American Institute of Chemical Engineers, a member of the American Chemical Society, and treasurer of the M.I.T. chapter of Alpha Chi Sigma, professional chemical fraternity.

Morris A. Adelman received the degree of master of arts from Harvard University in February, 1948. He was a member of the War Planning Board in 1941-1942 and more recently has served on the Board of Governors of the Federal Reserve Board. At M.I.T.,



M.I.T. Photo

Ralph L. Evans, Jr., '48, represented the United States in dinghy sailing at the 1948 Olympics last August at races held at Torquay, Devonshire, England. Up to the time of going into the seventh race, Evans was in the lead. In the final race, in close competition with representatives from 21 nations, broken gear forced Evans to drop behind to finish second in the final totals; the first place, by a few points, went to Denmark's representative. The record established by Evans is the best made in dinghy events by United States representatives in Olympic sailing, and reflects creditably on collegiate sailing in this country, especially since the type of craft used in the Olympics is almost unknown in this country. At the left are the two sides of medals given to Olympic participants. Both sides of the silver medal, which was awarded to Evans for placing second in the races, are shown at the right.

Professor Adelman will be associated with the recently announced fellowship program sponsored by the Alfred P. Sloan Foundation.

Alan S. Michaels, 2-46, received the doctor of science degree from M.I.T. in June, 1948. While studying at the Institute he served the Department of Chemical Engineering as an assistant and a research fellow, and he was elected to Tau Beta Pi and Sigma Xi. He was with the Carter Oil Company, Tulsa, Okla. prior to returning to the Institute.

Lockhart B. Rogers holds the degree of doctor of philosophy from Princeton University. He was an assistant professor in the chemistry department at Stanford University, Calif., in 1943, and since 1943 has been a member of the staff of the technical laboratories of the Atomic Energy Commission at Oak Ridge, Tenn.

## Richards Centennial

ON July 17, Henry Richards, '71, oldest living Alumnus of the Institute celebrated his 100th birthday anniversary at the home of his daughter, Miss Rosalind Richards, in Gardiner, Maine. At a birthday party in his honor, Mr. Richards enjoyed numerous messages of good will which were sent for the occasion.

A letter from his son, Henry H. Richards, addressed to the late Charles E. Locke, '96, as Secretary of the M.I.T. Alumni Association, recalls the unusual occasion in the following simple but impressive words:

He is, as you doubtless realize, quite blind and pretty feeble in every way, but he was able to take in the messages from you and President Compton and was very glad to get them. He realized fully that he had crossed the century line, and took much quiet satisfaction in the fact, as well as in the many messages, flowers, etc., and in his 100-candle-power cake. He was even able to see the light of the candles. One notable feature of the day was the fact

that he had and enjoyed a bit of lobster for lunch! He was much pleased to hear about the exhibition of some 40 of his watercolor sketches which was staged in the Gardiner Public Library as part of the birthday celebration. It is a very good show. The dates of the pictures have a range of 60 years, and the subjects, though mostly in Maine, are in some cases as far afield as Bermuda, Athens, Antwerp, and so on.

## Class-Anniversary Volumes

THE appearance this year of at least two volumes dealing with class activities gives rise to a hope that this desirable practice will be emulated in the future. In the past, commemorative volumes on class activities have appeared from time to time, particularly in connection with the 25th or 50th anniversaries. But, so far as can be ascertained, this is not a regular practice; rather does it usually reflect the energetic initiative of a few individuals who willingly devote a great deal of their time and energy to the joy of their classmates.

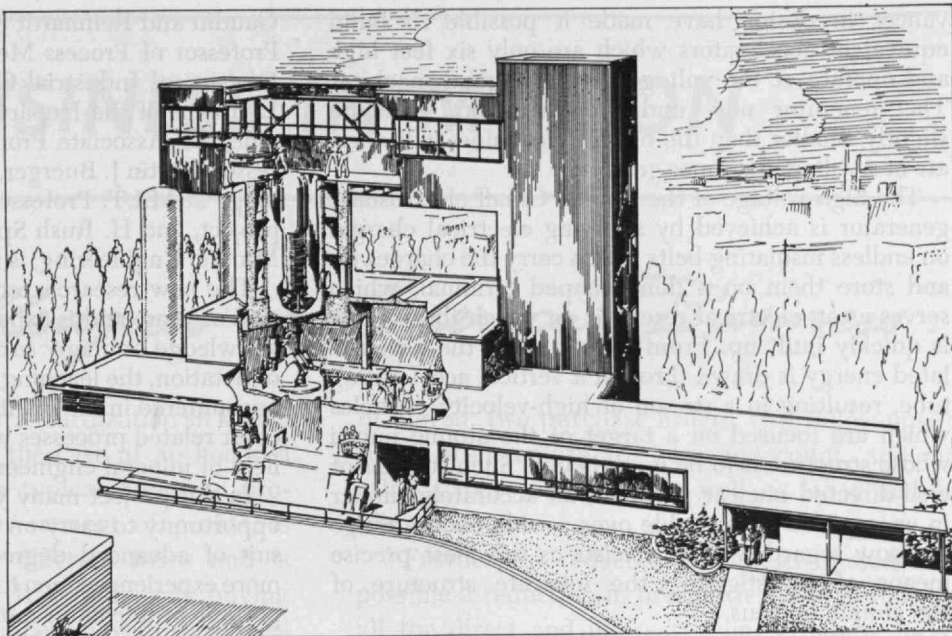
During the summer a *Golden Anniversary* brochure of the Class of 1898 has appeared, as did also a cloth-bound volume of the history of the Class of 1917. The former, prepared for the 50th Class Reunion last June, under the direction of Lester D. Gardner, '98, is primarily a directory and necrology of the Class of 1898, but serves as a reminder that this class also issued anniversary numbers in 1901, 1914, 1923, and 1928.

The volume of the Class of 1917, which has been made possible through the efforts of Thomas K. Meloy, '17, is a handsomely made volume of 271 pages bound in blue cloth with gold lettering. This *Thirtieth Anniversary Report* lists the class officers, gives the class history, provides vital statistics of its members, and includes a biographical sketch of each individual in the Class who responded to Mr. Meloy's quest for



Cutaway sketch of the structure, now under construction, which will house a new Van de Graaff-type 12,000,000-volt electrostatic generator. The new generator will be used for studying the biological effects of high-energy radiation on matter, and for nuclear research.

Many parts of the generator are under construction in the shops of the Laboratory for Nuclear Science and Engineering. The building to enclose it, described on page 30, is expected to be ready by next spring.



data. The chronicles of 1917's reunions since graduation are supported with a generous supply of photographs reproduced on calendered stock. It is a reference volume which class members will find useful throughout the years and one which can well be used as a guide by other classes desiring to publish their own memorial volumes. While credit for this outstanding work must go, largely, to Mr. Meloy, chairman of the Class Records Committee, many others of the Class of 1917 also made major contributions as acknowledged in the foreword.

### Three Coaches for M.I.T. Athletics

**A**PPPOINTMENT of three full-time staff members in Athletics and physical education at M.I.T. has been announced during the summer by Ivan J. Geiger, Director of Athletics.

The three are Arne Arnesen, formerly assistant coach in track at Springfield College, Springfield, Mass.; Warren Berg, formerly head freshman coach of baseball and basketball at Harvard University; and Benjamin R. Martin, formerly head coach of lacrosse at M.I.T. on a part-time basis. All three become instructors in physical education on the M.I.T. staff.

Now completing his requirements for a master's degree in physical education at Springfield College, Arne Arnesen is a graduate of the University of Wisconsin where he competed in varsity and freshman track. At M.I.T., Arnesen will coach field events in track and assist in coaching cross country. He is specializing in analysis of the mechanics of field events by high-speed photography, and it is expected that he will continue this work at M.I.T., in conjunction with Harold E. Edgerton '27, Professor of Electrical Measurements.

A Harvard pitching ace during undergraduate days, Warren Berg has since played with the Lynn Red Sox and other local teams. For the past two summers he has served as director of the Y.M.C.A. Caddy Camp at Osterville, Mass. Beginning this fall, he will be head baseball coach and serve as assistant basketball coach at M.I.T.

Benjamin R. Martin was an All-American lacrosse player at Syracuse University, from which he was graduated. He has been head coach of lacrosse at Harvard University. Since 1945 he has held the same position on a part-time basis at M.I.T.; during that time his teams have compiled an enviable record of wins. Beginning this fall, he will serve as head coach in both lacrosse and hockey at M.I.T.

### Generator for Nuclear Studies

**C**ONSTRUCTION of a 12,000,000-volt electrostatic generator, which will make it possible to bombard atomic nuclei at a voltage several times higher than that produced by any existing machine of similar type, has been started at the Institute. Announcement of the Institute's new high-voltage project was made recently by George R. Harrison, Dean of Science.

The new generator will be of great value in nuclear research for it generates high voltages at direct current which will permit precise experiments in the disintegration of nuclei. The energy developed in the steady streams of positive ions accelerated by this device will be sufficient to explore the structure of even the heaviest of the atomic nuclei. A unique feature of the generator is that the energy can readily be varied from zero to maximum voltage to cover a wide range of experimental requirements.

An outgrowth of the original generator designed by Robert J. Van de Graaff, Associate Professor of Physics at M.I.T., the new machine has been improved largely through the researches of John G. Trump, '33, Associate Professor, and his associates in the Department of Electrical Engineering, who have been active in the development of new techniques for insulating high-voltage apparatus through the use of gas under high pressure. The original big Van de Graaff generator, built in 1933, produced potentials of 2,000,000 volts and with modifications of design was used to great effect during World War II for radiographic examination of heavy castings. It is still in operation for precise studies of nuclear structure. Successive ad-

vances in design have made it possible to build equivalent accelerators which are only six feet high and operate at the voltage of the original machine. The generator now under construction, although slightly smaller than the original machine, will operate at a voltage six times greater.

The high voltage of the Van de Graaff electrostatic generator is achieved by spraying electrical charges on endless insulating belts which carry the charges up and store them on a dome-shaped terminal, which serves as an electrical reservoir on which the voltage is quickly built up. From this terminal the accumulated energy is drawn through a vertical accelerating tube, resulting in a stream of high-velocity particles which are focused on a target of the atomic nuclei whose structure is to be investigated. Such streams of well-directed nuclear particles, all accurately similar in energy and controllable over a wide energy range are now regarded by physicists as the most precise means of investigating the intricate structure of the atomic nucleus.

In addition to its use for nuclear research, the new generator will be used for studying the biological effects of high-energy radiation on living and nonliving matter. Such studies may include the inactivating effects on bacteria, virus, and enzymes, as well as the possibilities of utilizing such radiations for the treatment of malignancies.

### **Tracer Research**

**M**ODERN radioactive tracer techniques provide engineers with an analytical tool hundreds of times more sensitive than the older chemical methods and it is expected that their use will lead to more efficient production of metals from raw ores.

Studies by this method are made by following the electron emissions from radioactive atoms which are introduced into any substances to be studied. For example, it is possible to tag copper sulphate with radioactive copper with the copper sulphate added to the mineral, sphalerite, in water. By means of a Geiger counter, it would be a simple matter to determine the amount of copper extracted from the solution. Many metallurgical problems of a similar nature but less simple will be studied by this method.

Significant, therefore, is an announcement by Thomas K. Sherwood, '24, Dean of Engineering, that research on the application of radioactive tracer techniques to mineral engineering problems will be expanded in the Department of Metallurgy at M.I.T. under a grant from the research division of the United States Atomic Energy Commission.

The new program will make it possible to carry on fundamental research which is expected to be of special value to the mineral industry, and also to train engineers in the use of radioactive tracers in this important industrial field. The research program will require the services of men trained in the field of mineral engineering, and chemical engineering, as well as scientists from the related fields of physics and geology.

The project, which will be started at once, will be under the direction of an advisory board composed of Bruce S. Old, '38, of Arthur D. Little, Inc., and the Atomic Energy Commission; Professor Antoine M.

Gaudin and Reinhardt Schuhmann, Jr., '38, Associate Professor of Process Metallurgy; John Dasher of the Division of Industrial Coöperation; Professor Robley D. Evans of the Department of Physics; John W. Irvine, '39, Associate Professor of Chemistry; and Professor Martin J. Buerger, '24, of the Department of Geology at M.I.T. Professor Gaudin is supervisor of the project, and H. Rush Spedden, Assistant Professor of Mineral Engineering, is its executive officer.

The new research program will extend over a period of years and is expected to advance fundamental knowledge on many subjects, such as the mechanism of flotation, the leaching of metallic ores, the reactions encountered in the smelting and refining of metals and other related processes which come under the general field of mineral engineering.

In this project many young graduates will have an opportunity to carry on scientific research in the pursuit of advanced degrees, while it will also enable more experienced men to undertake the solution of important problems in mineral engineering by employing the newer techniques in the use of radioactive substances.

### **New Class Marks Normal Peacetime Program**

**W**ITH the opening of its 84th academic year on September 27 the Institute returned to a normal peacetime program, the last of the accelerated war classes having been graduated on September 24.

With a freshman class of 826, the Institute's total enrollment this year will be slightly more than 5,000. In line with the Institute's prewar policy of stabilizing its student body to permit the most effective instruction, this year's freshman class is somewhat smaller than last year's.

The number of veterans in the entering class is approximately 10 per cent lower than that of last year, although with the large number of former service men still studying in the upper classes, veterans constitute approximately one-half the total enrollment. The peak of registration for these men, however, has now been passed.

For the first time since World War II, this year's students include 250 transfers from other colleges, among which are 34 from educational institutions associated with M.I.T. in a combined plan of liberal arts and technical education.

### **Progress in Mechanical Engineering**

**T**HE Visiting Committee on the Department of Mechanical Engineering\* met at the Institute for an all-day session on April 9, 1948. During the morning, officers of the Administration and of the Department conducted members of the Committee through the various laboratories and provided an opportunity to discuss matters with various members of the Department. The later portion of the day was devoted to a  
(Continued on page 44)

\* Members of this Committee for 1947-1948 were: Joseph W. Powell, chairman, Rear Admiral Luis de Florez, '11, Norman D. MacLeod, '14, Frederick S. Blackall, Jr., '22, Ralph E. Flanders, Alexander Fraser, and Clifford Roberts.



# BUSINESS IN MOTION

## *To our Colleagues in American Business . . .*

This is a story of material standardization in which Revere played a part. It is the case of an honored company, which through the typical American process of growth through reinvestment of profits, is now making a great many different items and is known to almost everyone. It found itself buying copper alloys in a large number of widths, gauges and tempers, some of them differing but slightly. If the same material could be used for, say, six parts instead of one, there would be a gratifying saving through purchasing in larger quantities.

Revere was asked if it would like to participate in an examination of the possibilities of standardization of materials for this company. The Technical Advisory Service was given the assignment, and with the full cooperation of the customer's engineering and production heads, made a study that resulted in a confidential report covering 74 pages. Out of 360 parts, changes were suggested in gauges, lengths, tempers and alloys for 225.

Let us quote from a speech by one of the company's engineers to his sales department. Referring to one type of product, he said, "By changing slightly the widths and thicknesses of various brass and bronze strip used in the pressroom, we were able to reduce eleven sizes to one each of brass and bronze . . . That has been done, of course, without affecting in any way the functioning qualities, durability or sales appeal . . . And how do we benefit? We now have two material requirements instead

of eleven, two purchase orders, two follow-ups, two items of inventory to store and count, and many other paper short-cuts, as well as labor and handling economies.

"Further, the reduction in number of sizes makes possible a reduction in inventories of materials, with all the direct and indirect savings thereby brought about.

"Finally, perhaps the greatest gain in a survey of this kind is that it requires the analysis of products and production processes as a whole. It is directly opposed to piecemeal planning and instead requires over-all cooperative effort which usually leads to savings otherwise overlooked.

"Simplification of materials is no front-page method of slashing costs or inducing production to soar. Instead, it is sound engineering which pays modest but worthwhile dividends while maintaining or improving quality."

Because in some cases new equipment is needed, the full effect of this standardization program has not been felt as yet, but already savings of \$25,000 are in sight this year. Revere is exceptionally proud of this study, yet after all, its results were made possible only by the cooperation of the customer, who was eager to take full advantage of our knowledge.

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## THE INSTITUTE GAZETTE

*(Continued from page 42)*

discussion of those matters which will, in the opinion of the Committee, best further the important work of the Department.

The Committee believes that members of the Department have a dual responsibility: (1) to constantly improve their teaching methods in order to provide the best inspiration and training for students with whom they come into contact; and (2) to promote their own professional standing by advanced study, by conducting research and consulting work, and by taking an active part in the activities of their professional societies and of the Faculty. It is recognized, that these objectives may, at times, be conflicting.

As a result of its visit and discussion with members of the Department, the Committee offers the following report on the present laboratories and facilities of the Department:

The present quarters for the Machine Tool Laboratory are thoroughly inadequate to meet the present needs of students in Mechanical Engineering. It is very important, therefore, that the new Machine Tool Laboratory be completed at the earliest possible moment. It is understood that some progress has been made toward raising the necessary funds for this building. Upon its completion, the present operations of the Machine Tool Laboratory now in Building 3

should be transferred to the new site, to leave more nearly adequate space in Building 3 for the Department's other work. The progress in installing new tools in the Machine Tool Laboratory was noted and the problem of storage and insurance on the remaining tools, which runs into a very considerable annual sum, was explained to the Committee.

The availability of space, equipment, and facilities for the advanced instruction was strikingly apparent in the Gas Turbine and Sloan Automotive Laboratories which serve as admirable examples for technical instruction. In contrast to the situation in the Sloan Automotive and Gas Turbine Laboratories, equipment in some of the older laboratories was apt to be crowded and generally not as modern as is now desirable. Some improvement can be made with existing equipment through improved illumination.

The relative place of undergraduate and advanced work in institutes sponsoring research was discussed with the staff. It is gratifying to observe that such research at M.I.T. leads to increased practicability of graduate work. The rapidly widening field of knowledge, which cannot be covered in the undergraduate course, and the increased demand of industry for better trained men, seem to point clearly to the necessity for the greatest attention to this branch of the Institute's instruction. Certainly facilities should be available to all qualified M.I.T. graduates who may offer to undertake additional courses leading to master's and doctor's degrees.

*(Continued on page 46)*

### MISSOURI PACIFIC LINES

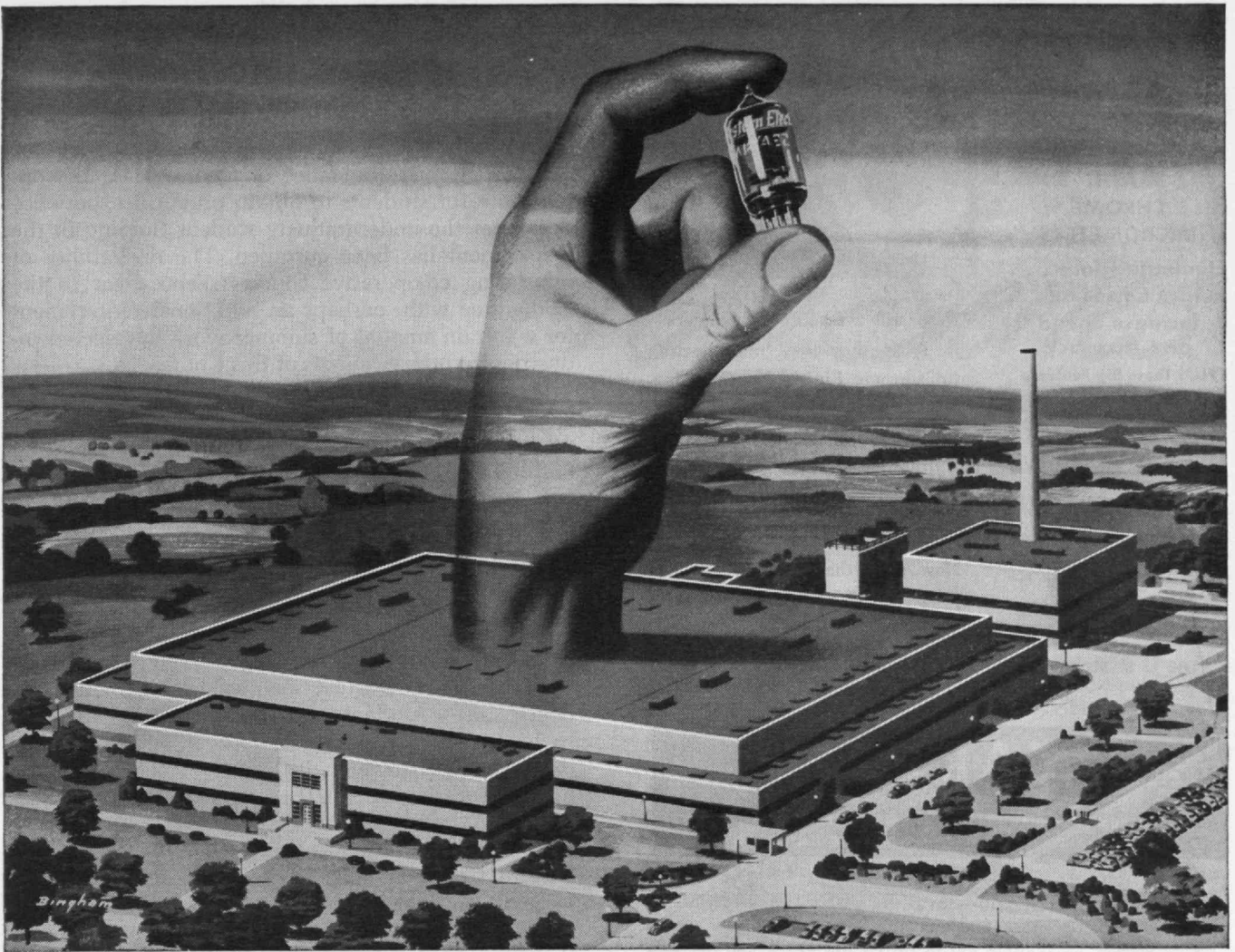
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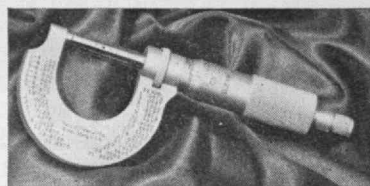
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## THE INSTITUTE GAZETTE

*(Continued from page 44)*

Since the discontinuance of Course II-A, the opportunity for students to obtain practical experience as part of the undergraduate student training in the Department has been curtailed. The desirability of reinstating co-operative courses seems clear to the Committee with, perhaps an additional requirement for a certain amount of summer work in selected industries for other students of this Course.

Professor Jerome C. Hunsaker, '12, outlined to the Committee his proposal for two years of graduate work in required courses and leading to a master's degree. Such work appears extremely desirable in the training of men who expect to design aeronautical engines, steam turbines, and other complicated machinery, such as printing presses and paper machines. The inclusion of additional work in the humanities could well be considered with a view to broadening the training so that the graduate of a fixed course would not be too closely bound to a single field. Your Committee believes that such set courses will be of benefit to the student and to the Institute, and that such restricted courses are an advantage to the student whose narrower point of view does not enable him to choose as wisely as can the Faculty for the best preparation for work in a given field.

Beginning with the academic year 1948-1949, Option 2 of Course II has been changed to cover the subjects of materials, design, and manufacturing. The proposed activities in metals cutting, in machine tool design, and in friction phenomena will add to the professional nature of the work offered by the Department, particularly in the Graduate School. The proper co-ordination of all of the Department's courses will be facilitated when the new Machine Tool Laboratory is established. It is important that instruction be planned so that fundamental science precedes the more professional work, and this problem has been met in a satisfactory manner. It is often necessary, however, to base instruction in design on fundamental science courses that are being studied simultaneously. This should be kept in mind in any further modifications of the undergraduate program, to insure that the necessary foundation work precedes this design course, so far as this may be found to be possible.

The Committee was informed that five lectures would be delivered to the sophomore class between April and June, 1948, to orient them in their selection of future courses. This is a most desirable arrangement and should be of great value to the students in choosing their professional studies wisely.

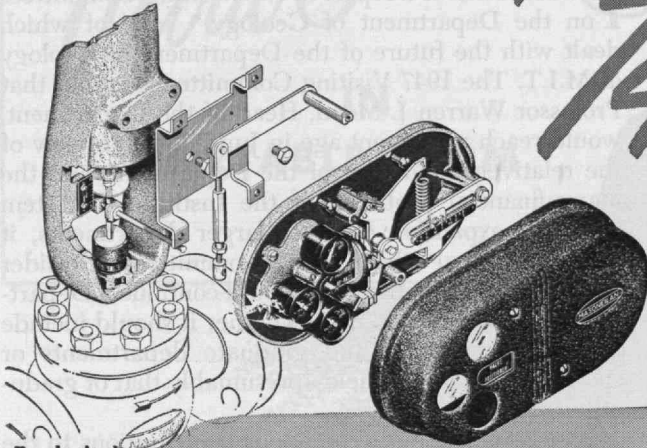
The Committee was impressed by the intelligent treatment by the Department staff of all of the various subjects discussed, by the deep interest of its members in their various courses, and by the open-minded consideration and discussion of the various problems that came to the attention of the Committee. Such spirit is the best possible guarantee that outstanding instruction is offered to Technology students.

*(Continued on page 48)*

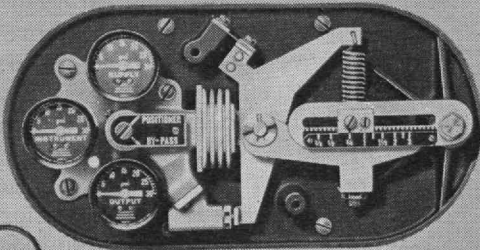


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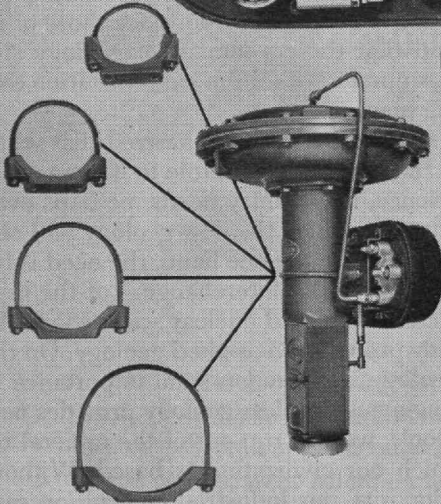
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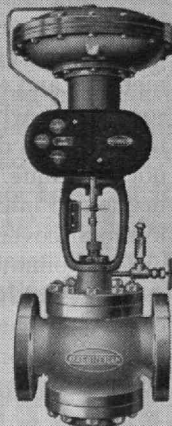


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## THE INSTITUTE GAZETTE

(Continued from page 46)

### Committee Report on Geology

IN a sense this is a report of two Visiting Committees on the Department of Geology,\* each of which dealt with the future of the Department of Geology at M.I.T. The 1947 Visiting Committee was told that Professor Warren J. Mead, Head of the Department, would reach retirement age in June, 1949. In view of the relatively small size of the Department, and the many financial problems of the Institute that stem from the expansion of other larger departments, it seemed logical that both Committees consider whether or not the Institute should continue a Department of Geology, and if so, whether it should include both undergraduate and graduate departments or specialize only in one field—presumably that of graduate instruction.

Science is making tremendous contributions to the knowledge of the phenomena that occur around us on the surface of the earth, in the air above us, and even in the universe of which we are a part. In such a world, the Committee feels that there is no reason to believe that we should discount the future contributions of science to the knowledge of what lies below the ground and its importance to coming generations. It was felt that the contributions of geology during the next 25 years should eclipse in importance those of its entire past, and that the enrollment of geology students shows an appreciation of the modernization that has been taking place.

In this year's meeting it was emphasized that while geology needs the new tools available to it from other branches of science, the country needs, perhaps even more, the production which the new geology will certainly make possible. On the one hand, the need is for more and more liaison and interchange — of the type now given by electronics and nuclear science — in the solution of many problems of applied geology. On the other hand, geology is of fundamental importance to our whole economy, and unless geology provides new methods and tools, we will run out of the mineral resources on which our civilization is based. Without new mineral deposits, our industrial civilization cannot continue. Further research in geophysics is needed to improve old and to find new tools for use in the discovery of urgently needed oil.

The Committee feels, therefore, that M.I.T. should continue graduate and undergraduate instruction and research in geology. The Committee agrees with the Administration that, if this is to be done, our Department of Geology should be second to none.

(Continued on page 50).

\*Members of this Committee for 1946-1947 were: Bradley Dewey, '09, chairman, Louis S. Cates, '02, Francis J. Chesterman, '05, Norman L. Bowen, '12, William H. Callahan, '26, William O. Hotchkiss, and Neil Rice.

Members of this Committee for 1947-1948 were: Bradley Dewey, '09, chairman, Louis S. Cates, '02, Francis J. Chesterman, '05, Norman L. Bowen, '12, Victor Dolmage, '17, Thomas B. Nolan, and Neil Rice.



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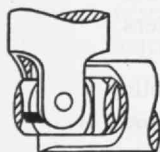
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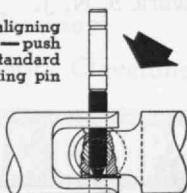
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## THE INSTITUTE GAZETTE

(Continued from page 48)

The Committee discussed the problem of making opportunities in the Department, and in the geology profession, better known to entering students so that the selection of students in geology could be broadened. The Committee felt this to be important to the future of the Department, and recommends that the importance of modern geology to our whole economy be emphasized. It is felt that every attempt should be made to make the requirements for joining the Department as flexible as possible, to the end that students who have some training in other fields may be given the opportunity to change to the Course in Geology if, and when, it is shown that this field represents their true choice.

The Committee also recommends that more emphasis be placed upon the teaching of engineering geology, particularly to civil engineers. The training in geology would be many-fold more useful to civil engineers were the present undergraduate Course expanded from two lectures plus one two-hour laboratory period each week for one term, to three lectures plus two laboratory periods. It was felt further that an effort should be made to develop and offer engineering geology as a professional elective and to offer advanced courses in engineering geology to graduate students in other fields.

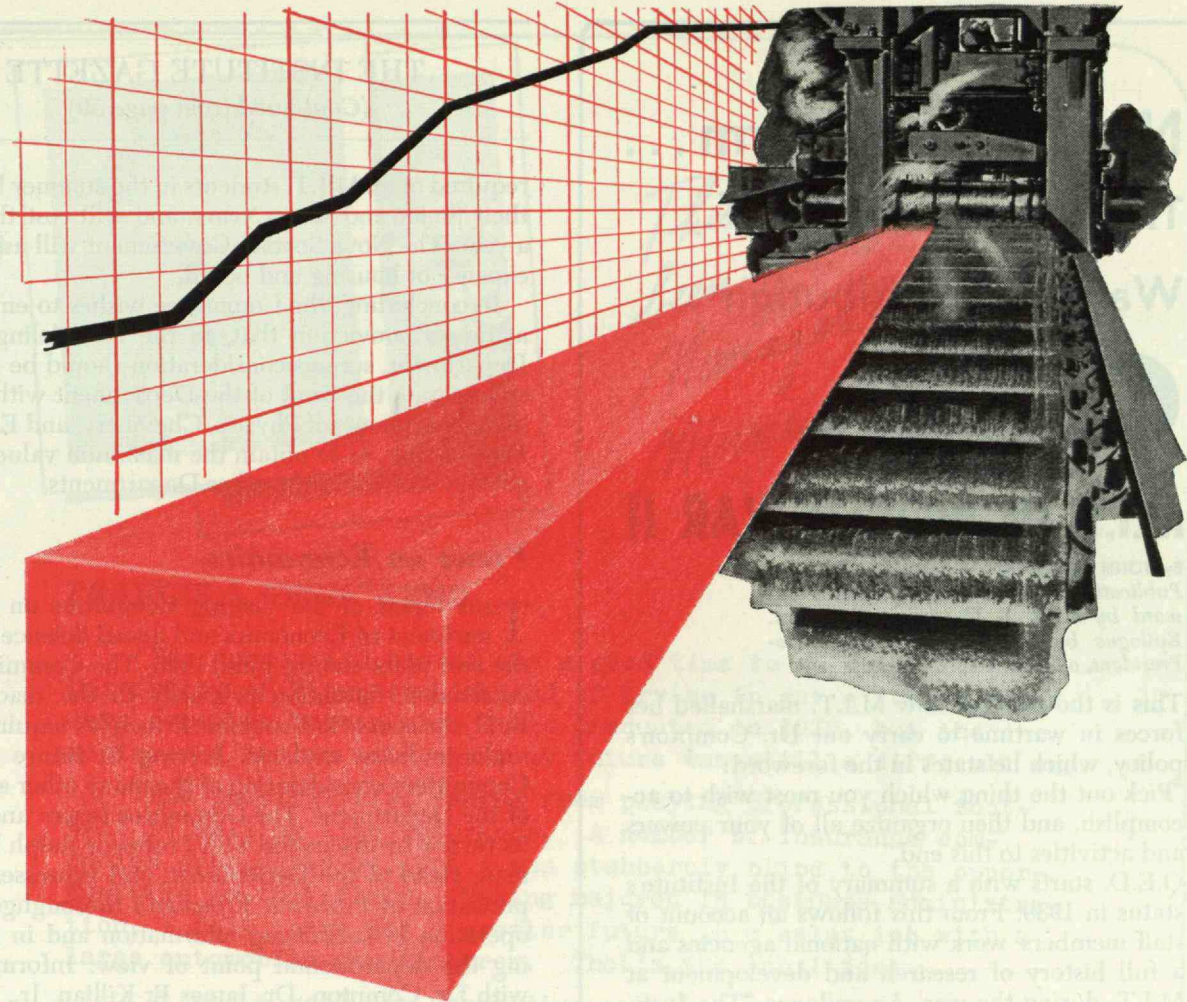
Professor Mead presented a full report on the state of the Department and outlined the research problems and fields of research covered by the various members of the staff. The Committee was impressed by the way in which these problems were so integrated that the staff will bring to bear new tools upon problems which are not solvable by older conventional methods of attack. The Committee was enthusiastic about the new summer camp arrangements reported by Professor Mead, by which the Institute is allowed to send 20 students each year to work under the auspices of the Nova Scotian Government in mapping the geology of Nova Scotia. This summer camp arrangement will be

(Continued on page 52)

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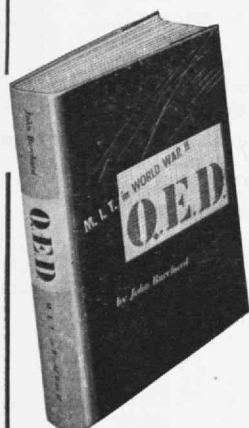
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Q.E.D. starts with a summary of the Institute's status in 1939. From this follows an account of staff members' work with national agencies and a full history of research and development at M.I.T. during the war. An epilogue "The Institute Redeploys for Peace" brings the story up to the present.

**CONTENTS—ORIENTATION.** M.I.T. in 1939. Perspective. RESEARCH AND DEVELOPMENT AT THE NATIONAL LEVEL. Research-Directing Agencies. Projects of NDRC. For the Army.

For the Navy. For the Office of Field Service. RESEARCH AND DEVELOPMENT AT TECHNOLOGY. The Division of Industrial Cooperation. To Make the Guns Behave. For the Wounded and the Well. Phenomena of Sky and Sea. In the Service of Materials. New Instruments and Tools. Prelude to Hiroshima. Electronic Cavalry—the Radiation Laboratory. THE STAFF AWAY ON DIVERSE MISSIONS. On the Production Front. On the Psychological Front. Consultants to Industry. THE HOME FRONT. Teaching in the War Years. EPILOGUE. The Institute Redeploys for Peace.

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**THE INSTITUTE GAZETTE**

(Continued from page 50)

required of all M.I.T. students in the summer between their junior and senior years, and will cost them \$60 a year. The Nova Scotian Government will assume all expense of housing and board.

In concluding, the Committee wishes to emphasize again its conviction that, in the remodeling of the Department, serious consideration should be given to so integrate the work of the Department with that of the Departments of Physics, Chemistry, and Electrical Engineering, as to obtain the maximum value for the geology student in the other Departments.

**Views on Economics**

THIS report of the Visiting Committee on the Department of Economics and Social Science\* covers the two years ending June, 1948. The Committee has confined its attention primarily to the teaching of Ec11, the course in Economic Principles required of all undergraduate students, leaving to future Visiting Committees consideration of the many other activities of the Department. The Committee began and ended its review by discussion with Professor Ralph E. Freeman, Head of the Department, and expresses its appreciation of Professor Freeman's thoroughgoing co-operation in submitting information and in presenting the departmental point of view. Informal talks with Dr. Compton, Dr. James R. Killian, Jr., '26, and Dr. Robert G. Caldwell were also very helpful.

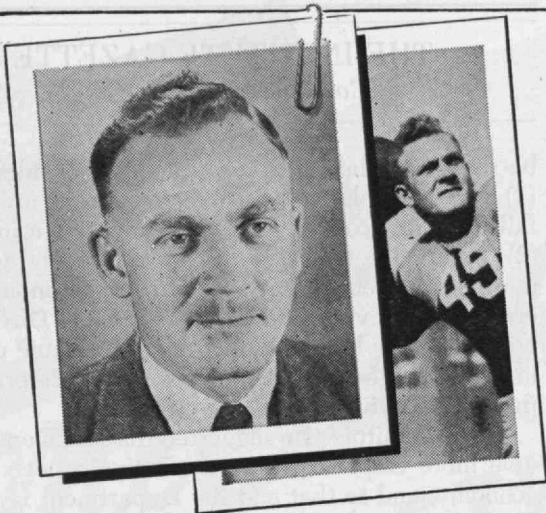
The Committee read the prepublication draft of the textbook used in Ec11 entitled, *Economics: An Introductory Analysis* by Paul A. Samuelson, Professor of Economics; it likewise also reviewed the list of outside references used in the course. Various individual members of the Committee reviewed one or more doctor's theses in economics, read some recent publications by the staff and, in some instances, interviewed recent graduates. Finally, the Committee gave consideration to the statement of policy concerning the teaching of Economic Principles, which constituted Chapter IV of the booklet "Humanities and Social Sciences" published by the Institute in the fall of 1947.

The Committee found that the teaching of economics at M.I.T., in common with many other educational institutions, has been greatly influenced by the writings of the late Lord Keynes. With the objective of maintaining full employment and high consumption in our economy, the Keynesian position has historically been associated with a considerable degree of central governmental planning. The suggestion was offered to the Department that when a student is studying economic theory concerning possible benefits of more central planning, his attention might also

(Continued on page 54)

\*Members of this Committee for 1947-1948 were: Walter J. Beadle, '17, chairman, Hugh Pastoriza, '07, Ellis W. Brewster, '13, Oscar S. Cox, '27, Beardsley Ruml, Charles E. Spencer, Jr., and Samuel S. Stratton. The Committee's report was signed by all but Mr. Cox who was unable to participate in the Committee's deliberations.





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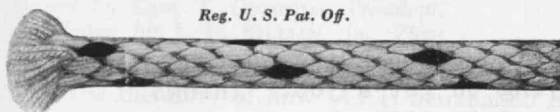
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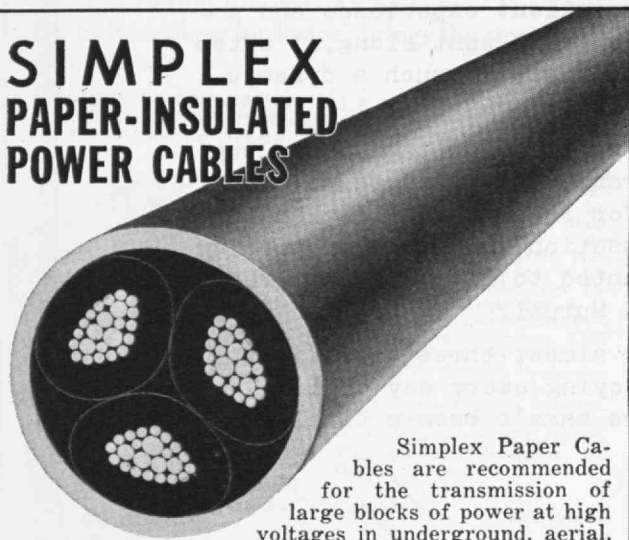
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## THE INSTITUTE GAZETTE

(Continued from page 52)

be drawn to the following practical considerations: (1) Economic planners for the government are no less fallible than economic planners for private industry; (2) Errors by the government are likely to have more serious effects on the country's economy than errors made by individual concerns; (3) Direct economic activity by government and economic controls imposed by government may be strong deterrents to private initiative and risk investment.

The Committee also suggested that the Department give more emphasis to the incentive aspects of our economy, and to that end the Department is amending its list of required readings.

Among other things, the Committee concerned itself with the adequacy of the presentation of the principal relevant points of view, particularly from the more conservative or classical standpoints. When this was discussed with the Department and the Institute Administration, the Committee was advised that Professor Freeman has added the following clarifying sentence to the published statement of policy concerning the teaching of Economic Principles: "The textbook used in the course is supplemented by other readings which present differing points of view from those presented in the text."

The Committee believes that the published statement as clarified by Professor Freeman is a sound and acceptable statement of departmental policy. However, it is recommended that the Department, in proposing appointments and changes in personnel, give greater weight to the desirability of having differing points of view adequately represented on the Economics staff, thus promoting a more objective analysis and presentation of economic problems.

### Building Engineering and Construction

ON Friday, April 23, 1948, the Visiting Committee on the Department of Building Engineering and Construction\* met at the Institute. The morning was spent discussing the registration for the Course, de-

(Continued on page 56)

\*Members of this Committee for 1947-1948 were: Harry J. Carlson, '92, chairman, John H. Hession, '13, Percy Bugbee, '20, C. George Dandrow, '22, Francis A. Barrett, '24, Lou R. Crandall, and Henry R. Shepley.

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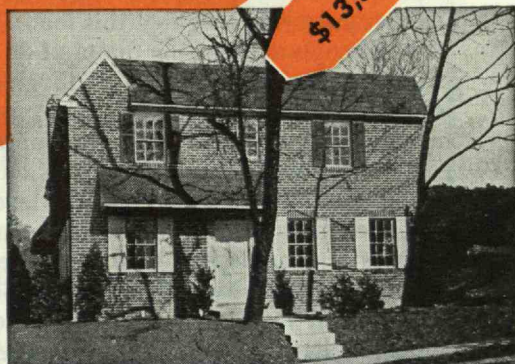


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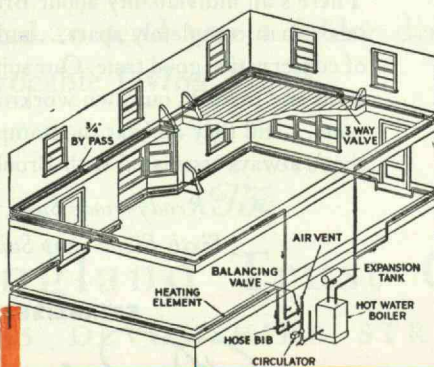
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## THE INSTITUTE GAZETTE

(Continued from page 54)

partmental research, space requirements, staff training, and placement. After luncheon at the Campus Room in the Graduate House, the Committee visited the several laboratories connected with the Department. The Committee was pleased to have the advantage of the comments of Thomas K. Sherwood, '24, Dean of Engineering, and Robert M. Kimball, '33, of the President's Office, during the discussion.

As related to teaching staff, the registration for the Course and the number of courses offered by the Department indicate a present load which is very heavy. The Committee recommends that the Administration seek adjustment to lighten this load. The Committee is of the opinion that the quota of 30 undergraduate students per year and 10 to 15 graduate students should be maintained during the present period of need for trained engineers in the building field.

The number of different courses offered should be maintained at the undergraduate level and possibly extended at the graduate level. In addition to the courses regularly given to students registered in the Department, service courses for the School of Architecture and Department of Civil and Sanitary Engineering have shown a very heavy registration which adds considerably to the task of the instructor because of the large numbers — which have run as high as 60 or 70 students — in some of these sections. These serv-

ice courses certainly should be continued and show an excellent co-ordination between the Department and other courses allied to building construction.

The Department is to be commended for its continued activity in research. The work being done in the field of plastics, in masonry materials, and in light metals is representative of the fundamental approach which the Department is using. The support which this work is receiving by grants-in-aid from the Plastics Materials Manufacturers Association, the National Lime Association, and Revere Copper and Brass, Inc. is appreciated.

The plan being used by the Department in the training of its younger staff members should be continued. The amplification of the academic activities of these young men by selective placement for several summers will be very beneficial in their future teaching and will keep the classwork up to date and stimulating to the students.

The Committee believes that the Department's present practice in assisting students in placement is most direct and should produce excellent results. The direct approach of the staff to employers in different geographical areas and with various needs is excellent, and contacts of this kind should be extended. This will not only disclose opportunities for employment but will make the Course more widely known and respected.

While the Institute has made some additional space available to the Department during the past year, it is desirable that space in Buildings 5 and 7 be made

(Continued on page 58)



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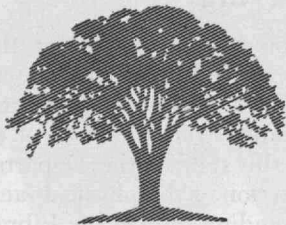
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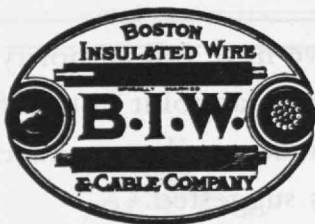
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## THE INSTITUTE GAZETTE

(Continued from page 56)

available for the eventual transfer of the Plastics Laboratory and for extensions of the Masonry Materials Research Laboratories. With the growing demand for undergraduate thesis work in these laboratories, and with no space whatever for the accommodation of graduate students who are doing research work in them, it is highly desirable to give such space requirements priority.

### *Naval Architecture and Marine Engineering*

MEETING on May 19, 1948, at the Institute, the Visiting Committee on the Department of Naval Architecture and Marine Engineering\* was greeted by several administrative officers of the Institute and members of the staff of the Department. Following this, an inspection of the physical facilities of the Department, including the Dewey Library and the Hart Nautical Museum, was made.

The Committee considers a towing tank, for which provision is made in the new Hydrodynamics Laboratory, a necessity for effective conduct of the Department's work. A tank, 106 feet by 8 feet and 7 inches by 4 feet deep, as proposed by the Department, is recommended by the Committee. A room in the basement of Building 5 has been assigned to the Department for a structural laboratory in which there will be installed a model stability tank. This tank will be designed by the Department and will be given by an alumnus of the Institute.

The Committee does not recommend the suggested modification of the present apparatus in the propeller tunnel at this time, but urges the postponement of any modifications until a new and larger tunnel can be built and put into operation.

The present location of the Hart Nautical Museum is excellent. The size of the Museum, however, is totally inadequate for present needs and an extension, in each direction, parallel to the building corridor, is most strongly urged. More models will undoubtedly come into the Department in the near future. Even now the Museum is unduly crowded and quite a few models which the Department has are scattered in other locations so that their full value is not realized.

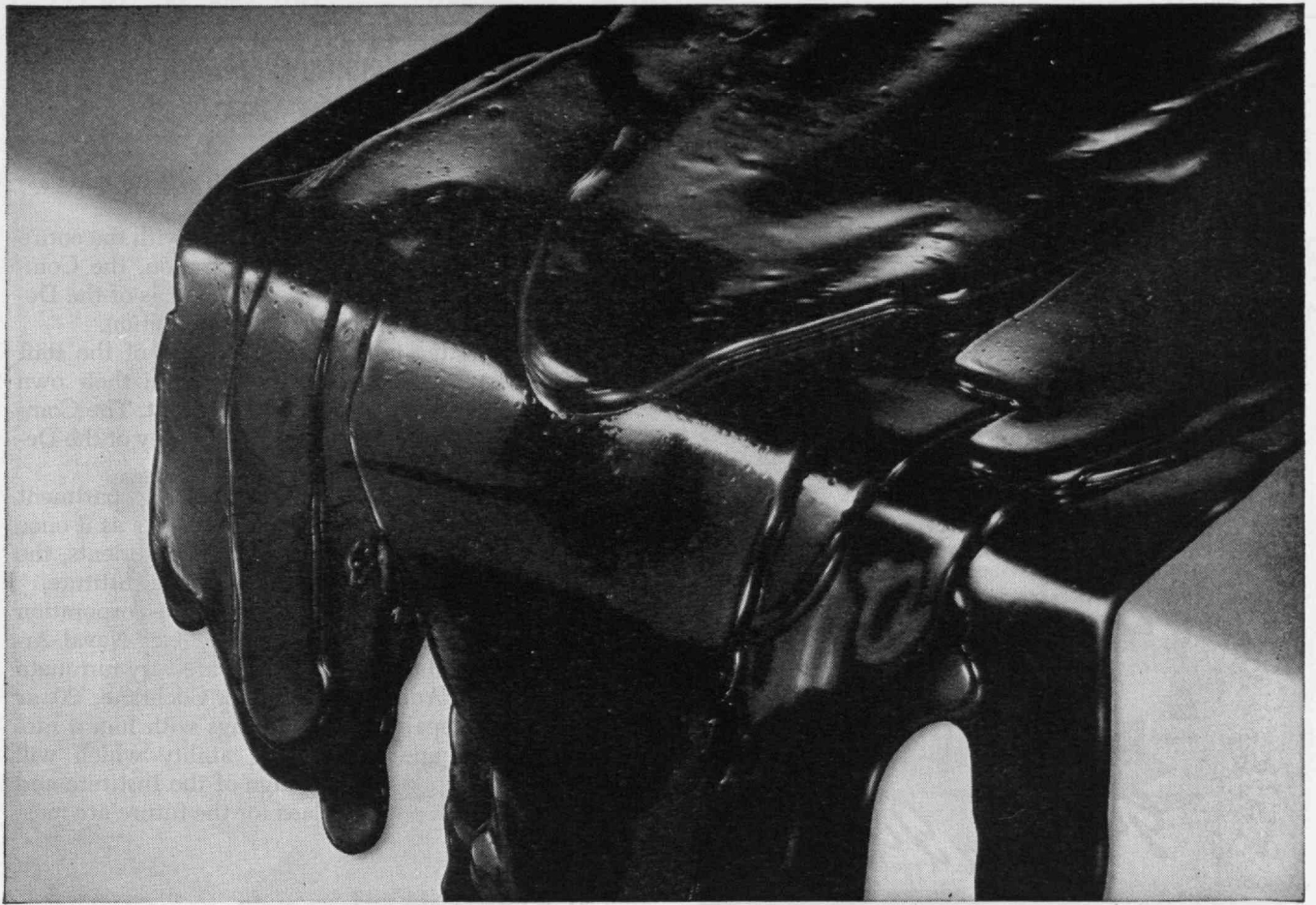
The Committee not only heartily approves, but urges, the addition to the staff of a new assistant professor of marine transportation for this Course. It is the considered opinion of the Committee that this Course is bound to increase in importance and it should be in a position to supply an enlarged future demand for its graduates.

The Committee notes with pleasure the plan to have the students in the three Courses, XIII, XIII-A,

(Concluded on page 60)

\*Members of this Committee for 1947-1948 were: William S. Newell, '99, chairman, Ellis W. Brewster, '13, Roy W. Chamberlain, '31, Eugene P. Worthen, '32, Victor M. Cutter, Vice Admiral Earle W. Mills, and John E. Slater.





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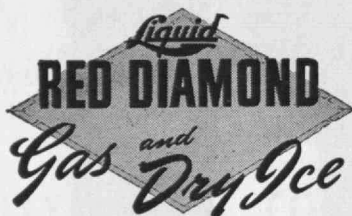
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## THE INSTITUTE GAZETTE

(Concluded from page 58)

and XIII-C, brought into closer and more intimate association with one another.

After lunch at The Graduate House, with the entire staff and members of the Administration, the Committee deliberated and discussed problems of the Department which were brought to its attention.

The Committee interviewed members of the staff individually, to obtain their opinions on their own work as related to that of the Department. The Committee thus feels that it made a good survey of the Department's activities.

Attention is called to the fact that this Department is by no means the smallest in the Institute as it once was. Based on the number of enrolled students, the Department is now of medium size at the Institute.

The Committee is glad to report to the Corporation that the Institute and the Department of Naval Architecture and Marine Engineering are very fortunate in having Vice Admiral Edward L. Cochrane, '20, as head of the Department. He brings with him a rare administrative and engineering ability which will measurably increase the prestige of the Institute and the Department, and his plans for the future are most encouraging.

## TACKLING TECH


To supplement the annual Freshman Camp in acquainting new students with the Institute's history, objectives, and methods — and to remind the reader that M.I.T. is a place where formal technical training is combined with cultural activities, sports, and recreation in developing high school graduates into mature, self-reliant individuals — the Institute has recently published a 90-page volume entitled, *Tackling Tech*. This handy 5½ by 8 inch book, described as "a student guide to the Massachusetts Institute of Technology," is useful to all to whom the Institute's activities may be vague. It makes inviting reading with its informal style and delightful drawings by Henry B. Kane, '24.

In *Tackling Tech* the reader may learn of strange and wonderful things at the Institute. He is informed that the Institute offers more than 1,200 subjects of instruction, that a well-known professor of mathematics formerly pitched for the Cincinnati Reds, that a professor of aeronautical engineering has won awards for his poetry, and that if the Institute had been built at its present location in 1775, students would have to reach their classrooms by rowboat. Although intended primarily for students, *Tackling Tech* recalls that the Alumni Placement Bureau annually handles 3,000 employment cases, helping Alumni and industry find each other. There is a section on "The Boston Area," and if the student overlooks the text on historical spots and museums, he quickly familiarizes himself with the list of girls' schools given on pages 80 and 81. Finally, for those desiring more information about the Institute, *Tackling Tech* concludes with a list of references on the past, present, and even the future of M.I.T.



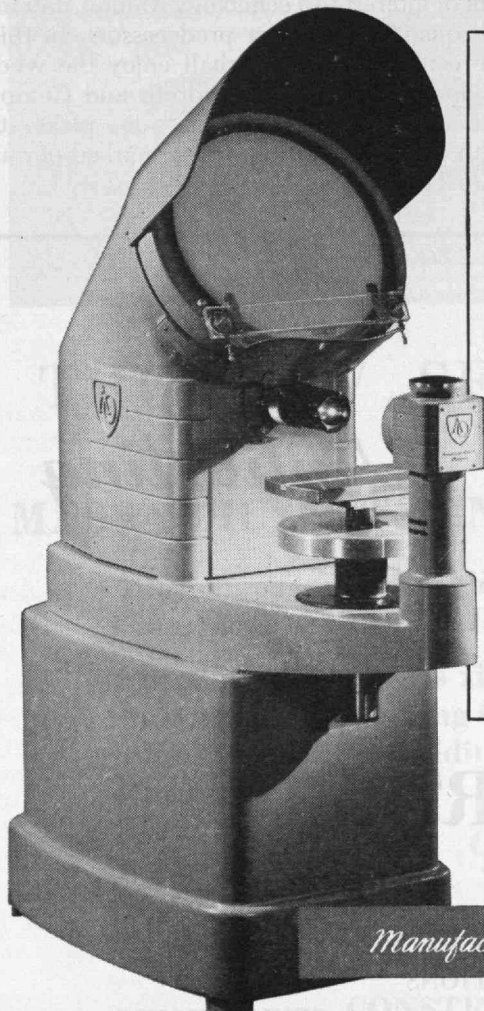
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(Concluded from page 20)

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### *Typographically Speaking*

**P**USHED off the first page of the Trend of Affairs by the recent action of the Corporation in voting new offices for Drs. Compton and Killian is the announcement of a change in printing facilities for The Review. Possibly many readers will already have observed the changes in typography, trim size, and layout which are reflected in this issue. With The Review completing half a century of continuous publication, certain changes in this direction were due in the normal course of events, but those now in effect already represent the influence of co-operation between The Review and its new printer, E. L. Hildreth and Company, Inc., of Brattleboro, Vt.

For almost a quarter of a century The Review has been printed at the Rumford Press in Concord, N.H. During this period The Review showed its greatest growth, not alone in size of issues, but in excellence of typography, layout, and editorial content, and it rose to an outstanding position in the field of alumni periodicals. It is a pleasant task to acknowledge the helpful co-operation of members of the Rumford Press, not alone in Concord, but especially in Rumford's Boston Office, which was often called into consulta-

tion on production problems during this important period in The Review's history.

During the past quarter century, The Review's expansion was especially noticeable in the amount of composition to be set each month. At present the amount of copy to be set for Class and Club Notes alone is equivalent to that of a full-length novel, and the editorial copy for the rest of the issue runs to at least 20,000 words each month. In the same 25-year period, the Rumford Press, likewise, expanded its facilities in conformity with the trend of most magazines toward very long press runs and relatively little composition, as judged by operations of The Technology Review.

It is not without regret that changed conditions in the postwar period made it desirable for The Review to seek a new printer; there is something pleasantly nostalgic about the slick 70-pound coated paper, fine half-tone reproductions, and close personal contact which characterized the production of The Review in earlier years.

In the last analysis it is up to the reader to determine the acceptance and welcome accorded to The Review when it enters his home or office each month. We shall strive, as always, to make the editorial content of interest to Technology Alumni, and to maintain the quality set by our predecessors. In this task we are confident that we shall enjoy the wholehearted co-operation of E. L. Hildreth and Company, Inc., and we look forward to the same pleasant relations with this firm as have always marked our association with The Review's printer.

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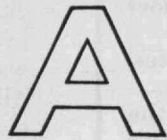
SENIOR HOUSE



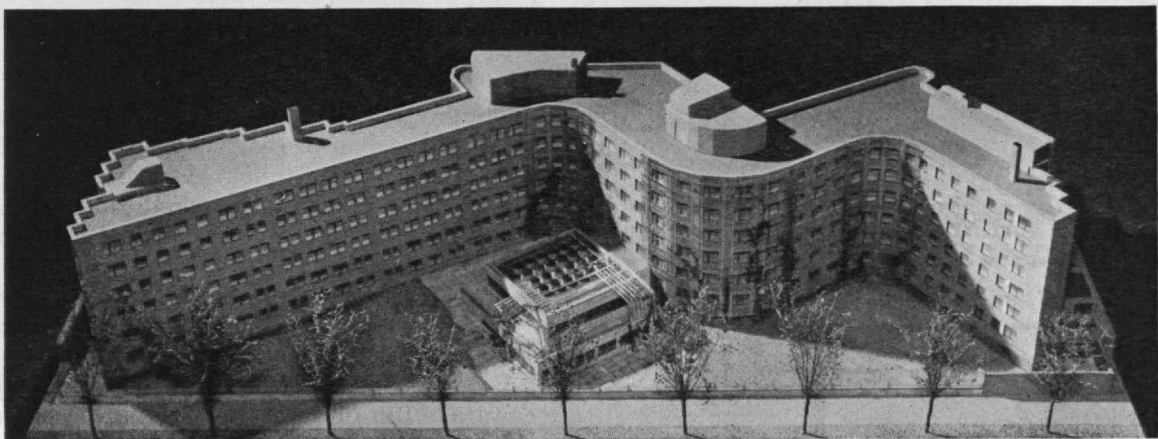
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## EDUCATION FOR PROFESSIONAL RESPONSIBILITY

... a report of proceedings of the Inter-Professions Conference on Education for Professional Responsibility, Buck Hill Falls, Pennsylvania, April 12, 13, 14, 1948.

Published October 15      \$3.00      220 pages

### CARNEGIE PRESS

Carnegie Institute of Technology, Pittsburgh 13,  
Pennsylvania

## INTERNATIONAL RELATIONS

(Continued from page 36)

dent and sickness, health insurance was obtained for each student during his period of stay in Cambridge. The facilities of the Medical Department and of the Homberg Infirmary were available to our visitors on the same basis as they are available to regular M.I.T. students. Service of the Medical Department was either gratis or covered by health insurance provided by the Foreign Student Summer Project, so that there was no cost to the foreign student for these facilities. All were given x-ray examinations upon their arrival, but as a group they were remarkably healthy throughout their stay in the United States.

For the most part, the foreign students represented an unusually high caliber of individual. All of them were graduates of technical institutions or the equivalent; in addition there were many with considerable industrial experience.

From an administrative point of view it was important to register these students as listeners only and not to require them to study for credit. This made for greater freedom in the selection procedure, and for greater flexibility in their M.I.T. programs. Students in this project were not required to fulfill the prerequisites expected of a regular student but could register for any subject from which they might hope to benefit. Nevertheless, the summer session at M.I.T. presented a serious problem for them, since not all subjects on the graduate level were offered in the 1948 summer session. The planners of the project were aware of this dilemma, but only in the summer were living accommodations available.

### Studies Taken

A number of these graduate students took substitute subjects which often proved as valuable as the subjects originally selected. Some of them, for example, took courses in economics, business administration, and production methods. In the latter case, they were exposed to American practices which often differ from practices in Europe, but which were valuable for the very reason that such courses are not available in European engineering schools. Others took courses in the humanities or the social sciences. One Finnish student in architecture worked on the design and architectural details of the new Senior House; another electrical engineering student obtained valuable experience with the differential analyzer and will have charge of the construction of such a calculating machine for his own university.

Through the generous interest of the Institute staff, several students were allowed to participate in research projects already under way. One worked on a problem in the flutter research laboratory of the Department of Aeronautical Engineering, and one helped in the building of a Van de Graaff generator. These students were all exceptionally good ones, well advanced in their fields, and were in a position to make valuable contributions to their projects.

(Continued on page 66)



## Exacting Specifications

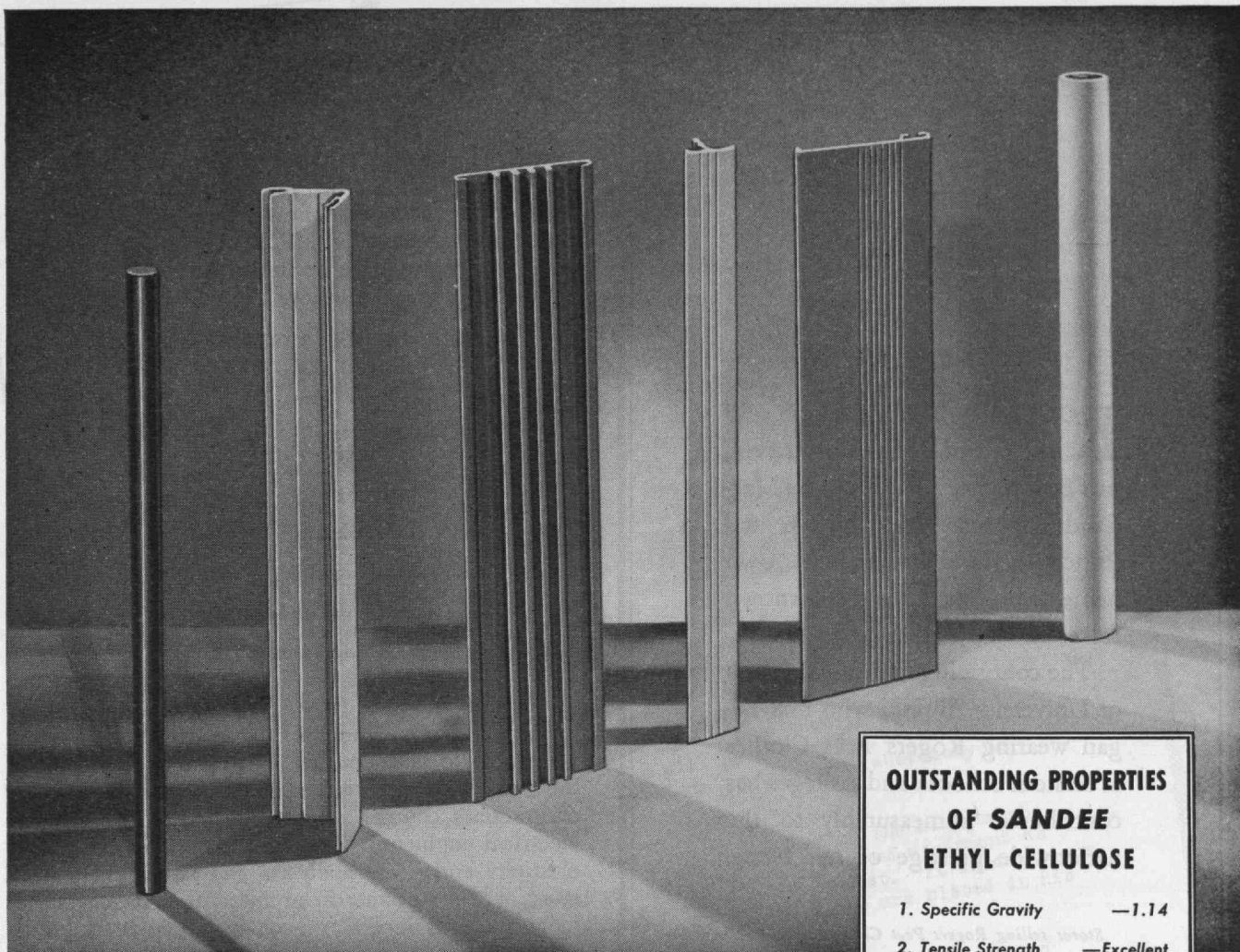
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## INTERNATIONAL RELATIONS

(Continued from page 64)

It is difficult to give an accurate and concise outline of the subjects which the foreign students took at the Institute. The table of professional fields and general subjects selected at M.I.T. by this group, and reproduced below, may be indicative of the range of interests represented by our summer guests.

### FOREIGN STUDENT SUMMER PROJECT TALLY BY COURSES

<i>Course</i>	<i>Number of Foreign Students Registered</i>
I — Civil Engineering	8
II — Mechanical Engineering	9
III — Metallurgy	1
IV-A — Architecture	5
V — Chemistry	5
VI — Electrical Engineering	20
VIII — Physics	4
X — Chemical Engineering	3
XII — Geology	1
XIII — Naval Architecture and Marine Engineering	1
XVI — Aeronautical Engineering	5
<b>Total</b>	<b>62</b>

By and large, students in electrical engineering were able to take courses in their own field and of their selection, since a reasonably extensive number of graduate courses were offered in this field. One electrical engineering student took courses in photoelasticity and stress analysis. The same was true of most of the students in architecture. On the other hand, students in civil or mechanical engineering took some courses in economics and production. Students in chemistry and chemical engineering took some courses in their professional fields, but frequently found interesting courses in molecular structure, electronics, and nuclear physics. A student in Naval Architecture took related courses in machine tool laboratory, gas turbines, internal combustion engines, dynamics, and experimental stress analysis. The registration, by departments, of the foreign students is given in the table of Foreign Student Summer Project Tally by Courses.

A number of students enrolled in subjects in the Institute's Division of Humanities and were very much impressed by these subjects, since in European technical schools no courses are given in the humanities or the social sciences. A considerable number of the group hold junior staff positions in technical universities abroad, and it was this group which perhaps felt they had gained most from their studies at the Institute. They were all grateful for the opportunity to observe teaching methods different from their own, and a number have stated they intend making a formal report to their own institutions on M.I.T. methods, with recommendations for the adoption of many.

The students themselves have felt that they learned in many ways aside from the formal classroom instruction. They were all impressed with the Institute's laboratories, where materials and equipment were in much greater supply than in their own laboratories, and they felt they had profited greatly by observing

(Continued on page 68)



# MEMORANDUM

Date: September 20, 1948

From: W. J. Smith

Case No.: L-394

To: T. L. Wheeler

Subject: Desirable Characteristics of a Beginning Research Laboratory Worker on Industrial Problems and Products.

AGE: A new or recent graduate. A few years of experience would not be objectionable, but the man should be young so that he can be trained into our way of working.

EDUCATION: A B.S. in Chemical Engineering. A graduate degree does no harm if the man fits it and doesn't take it too seriously. He need not be a ØBK or an intellectual prima donna. Ordinary sound intelligence and common sense has been found suitable for practical work.

RESEARCH ABILITY: Must be observant so that facts are seen accurately. Should be alert to the unusual. Ingenuity is needed to carry out uncommon procedures and to overcome difficulties when they arise. Must be able to do a fair share of his own thinking.

PERSONALITY: A friendly disposition is indispensable. He will need the help and cooperation of other people. He can't afford to antagonize anyone. Sooner or later he will work with clients. A cheerful outlook will come in handy.

ATTITUDE: Must genuinely enjoy experimental work so that it takes first place in his interests. Such a man will be a self-starter and furthermore he won't expect to "graduate" out of the laboratory in a year or two.

SPECIAL ABILITIES: Because of the unpredictable nature of the assignments a worker must be able to devise and improvise pieces of equipment as needed. Therefore, good mechanical aptitude is a must. It is a serious handicap to progress if a man can work only as tools are placed in his hands.

ABILITY TO WRITE: Eventually, nearly all laboratory work must be written into a report for the benefit of some outside person or group. Details are best described by the individual who actually has done the work. He should be able to describe his results clearly and in acceptable English.

W. J. Smith

ARTHUR D. LITTLE, INC.

WJS:abm

This job specification was prepared for us by one of our group leaders seeking an assistant. We believe it a good, concise summary of requirements, both in our own operations in chemical engineering, mechanical engineering, biology, physics and chemistry, and in research laboratories generally.



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## INTERNATIONAL RELATIONS

(Continued from page 66)

experimental techniques. Many of them found our libraries particularly helpful and were eager to be brought up to date on literature not available in their own country.

Nor did all of the benefits of the project accrue to our guests of the summer. A professor of international relations called this summer's class the most interesting he had conducted because of the participation by foreign students. Our own student body benefited from contacts with Europeans, and a considerable amount of good will was developed on both sides of the Atlantic by the project.

In spite of difficulties and complexities, and in spite of a very demanding, and a very worthwhile extracurricular program, the students of the project found it a very stimulating and enriching experience. One of the students from Greece, writing to the Administration of the Institute in appreciation of the project, has written in part:

The whole project, as it is, is almost perfect. It is true that only a few courses were offered this summer but even if we did not find exactly what we wanted, I am sure that the experience acquired as a whole is worthwhile. I think that it is more important to see the way problems are faced

(Concluded on page 70)

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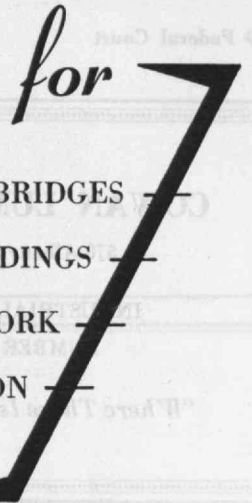
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## INTERNATIONAL RELATIONS

*(Concluded from page 68)*

in America than to learn a few things in the lectures. To that we must add the fact that we could never find in our countries laboratories as rich and as well equipped as those at M.I.T.

In spite of some mistakes which have been made in this interesting program of international relations, we feel the project was sufficiently successful that, in one manner or another, it should be continued in the future. A program such as that outlined is a specialized one and could not hope to meet the needs of the 15,000 or more students who come to the United States each year for regular courses of instruction in our universities and colleges. Still, the experience of the 62 European students who came to M.I.T. for a summer of study gives ample indication of the value of such a program to those who are fortunate enough to be able to take part in it. If our European guests benefited from this project so also did those members of the student body, Faculty, and staff who took part in the project in one way or another; there were benefits for those living on both sides of the Atlantic.

It is the hope of those who came into close contact with the administration of this project that other colleges and universities will be able to join in continuing the M.I.T. Foreign Student Summer Project plan which has, as its major objective, the enrichment of international relations through better knowledge and understanding of students in different parts of the world. It is only through mutual trust and understanding, to which this project made a very real contribution, that we may expect to look forward to the universal peace which the people of the world so much desire.

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## TECHNICAL PUBLISHING TODAY

(Continued from page 33)

ing successful companies and individuals to put into  
book form for the benefit of society the details of their  
own experience records. One example is the three-  
volume series in sanitary engineering by the inter-  
nationally known firm of Metcalf and Eddy of Boston.

The third type of operation is as follows: After  
World War I, an impressive result of co-operation be-  
tween large groups of scientists from many countries  
was published in four languages—the eight volumes  
of the *International Critical Tables of Numerical Data,  
Physics, Chemistry, and Technology*. Programs of this  
type show promise of becoming increasingly valuable  
as time goes forward.

Just after the conclusion of World War II, an-  
nouncement was made of the 27-volume group of  
books to come out of wartime research at the M.I.T.  
Radiation Laboratory, in which 500 authors took part  
in preparation of manuscript material. Approximately  
half of these volumes have already appeared, and the  
remainder appear at the rate of more than one volume  
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of volumes has been double that which was initially  
estimated, and 45 per cent of sales are made in foreign  
countries.

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the Atomic Energy Commission recently announced  
for publication. The first volume, published in Sep-  
tember, describes the histopathological effects of ra-  
diation. These volumes will be of fundamental impor-  
tance in medicine, physics, agriculture, power, metal-  
lurgy, and many other fields. In all, it is expected that  
approximately 60 volumes will be made available for  
public distribution over the next two years.

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and development results obtained at all major instal-  
lations of the Manhattan District, U.S. Army Engi-  
neers, and the Atomic Energy Commission, including  
the Argonne National Laboratory, Oak Ridge Na-  
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## M. I. T. BUILDINGS

(Concluded from page 30)

Street in Cambridge. Plans for this unit have been completed, but lack of funds are, at present, holding up construction.

The Department of Biology is now occupying relatively small quarters in Building 10, but the rapid growth of quantitative biology and its close association with developments in electrical engineering, nuclear science, and mathematics make necessary a new building for the Department of Biology. The need for greatly enlarged facilities in biology is clearly recognized and funds are being sought for a new structure to be built east of the main group of academic buildings, and connected with Building 8.

Plans have also been made for the construction of a laboratory for nuclear science and engineering to connect with Building 8 on the Institute lot. This building is urgently needed because of the vast importance which nuclear energy is expected to play in the health and general welfare of citizens in all parts of the world.

Dignified club facilities with dining rooms, meeting rooms, lounges, and recreational rooms have been sought for the use of the Faculty for many years. A faculty club would represent a very much needed improvement in the vicinity of M.I.T. Such a club is projected and will be built as soon as funds become available.

There is every reason for confidence that the facilities now under construction or projected will make as effective a contribution to the new era now unfolding for Technology as those described in this survey have been instrumental in shaping the Institute's influence and activities for the past 32 years. Never before has the Institute's prestige been higher and the outlook for the future is more than encouraging. But no amount of physical facilities can take the place of outstanding personnel. The success of the Institute's future depends upon the quality of scholarly leadership of the Faculty, staff, and students who will use the physical facilities of Technology. It is gratifying to recognize that this subject has received the same careful consideration as has been devoted to improving physical facilities at M.I.T.



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## MAIL RETURNS

(Concluded from page 10)

Accreditation Association was established about a year ago with Dr. Wada as its president. Beginning next year all the colleges and universities here will be chartered under the new system which is familiar to you.

Tokyo Institute of Technology was founded in 1929 by the government after its earlier existence as a trade school, and later technical school for nearly 50 years in all. At present T.I.T. is the only one of its kind in Japan, and it will be an institute of four-year courses beginning next year. We shall admit 300 first-year students, and in due time, we would like to have a graduate school.

We have now reached the stage where we have to decide on proper distributions of the corps of instructors among science, engineering, architecture, and humanities. Until a few years ago we had only one professor each in mathematics and physics. I shall be very happy if I could learn your opinion on desirable and necessary allocations of the staff among those various schools and divisions. The second problem of prime importance is how to maintain inspiring teaching members. Would you kindly teach us your procedures in appointing professors and others? In order to convey and transplant an M.I.T. spirit in Japan, I have written two books and several articles.

For a long time I have been out of touch with M.I.T., which has been enjoying the golden age under your presidency. With much admiration I have been studying your *President's Reports*. If I am not asking you too much, I should like to have your *Reports* since 1941, and other bulletins covering the period since 1938. Since last May I have been able to receive printed matter directly from the States.

It gives me joy to mention that Harry C. Kelly, '36, Deputy Chief of Scientific and Technical Section, E.S.S., GHQ., has given so much of his time to the reorganization of Japanese science. His untiring work will be long remembered with our hearty gratitude.

In the stupendous work of reconstruction of my country, I believe that Tokyo Institute of Technology must play a very important part, which is, however, accomplished only by your sympathetic guidance based on the experience, the wisdom, and the vast knowledge of the 18 years' presidency of M.I.T.

With my best wishes to you and your staff.

Tokyo, Japan

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# The M. I. T. Alumni Fund

## The Endowed Institution —A Necessity

*In a recent article in the Atlantic, Laird Bell of Chicago, attorney, director of corporations, college trustee, made a very convincing plea for the greater participation of corporations in financing our endowed educational institutions. In his article he defined clearly the place of such independent institutions in the overall educational system. His words are well worth noting.*

"Well as the state institutions have defended their academic integrity so far, there can be little doubt that the privately endowed institutions are more secure in their freedom from political pressure. It is charged, mostly from the left, that capitalists exert a subtle pressure by their past munificence and the hope of more. But this is small stuff compared with the fear of endangering appropriations that must be received every year. At least relatively, the endowed institutions may be regarded as citadels of freedom from political domination.

"There is no need to expand on the plight of the endowed institutions. Teachers must eat, like the rest of us, and their salaries will have to follow the cost-of-living curves. State pride can be counted on to enlarge university appropriations to meet growing costs. But endowment funds are not so elastic; rather their yield has been drastically cut down. Tuitions cannot be raised indefinitely in competition with the state-supported schools, even if the colleges were prepared to disregard the bad social effect of excluding students of slender means. At best, mounting costs and falling income may well snuff out the endowed lamps of learning in the fairly near future unless substantial help is forthcoming from sources which can afford such help.

"That such an outcome would be a disaster to the freedom which we cherish, and in which corporate enterprise has flourished, can hardly be questioned. Where the tradition of independence of learning has not been established, government has easily subjugated the universities to its purposes; witness Germany and Russia. Where the tradition is strong, government has respected it; witness Sweden.

"There are also subtler results to be feared. Our own state institutions are not so free as the endowed to experiment and to pioneer in untried lines, or in lines which may in the first instance be looked at askance by the voters. Or it may be necessary, in order to get funds for serious projects, to submit to logrolling and set up courses demanded by pressure groups, such as the ology of beauticians in California, thereby at one stroke debasing higher education and dissipating the energies of administration over trivialities. A brilliant project like the Nieman Fellowships at Harvard would be almost unthinkable but for private generosity; a state university would probably have had to set up one more school of journalism to grind out mediocre reporters for whom there are no jobs.

"The possibility of dry rot and mediocrity settling down upon state-supported schools without the stimulus of competition from the freer schools must also be recognized. The effect of all these factors can be tested by imagining what it would be like if we had forty-eight state universities and no Harvard or Chicago or similar institution to set the pace; or by contemplating the extinction of the liberal arts colleges."

# Alumni AND Officers IN THE News

## ❧ ELECTIONS AND APPOINTMENTS ❧

• SAMUEL LEWITON '17 was elected state secretary of the Massachusetts Society of Professional Engineers.

• WILLIAM W. WURSTER '17, and FREDERICK BIGGER, were appointed by President Truman as members of the National Capital Park and Planning Commission.

• JOHN E. BURCHARD '23 was elected a

trustee of the Boston Museum of Science.

• BERNARD E. PROCTOR '23 has been elected vice-president of the Institute of Food Technologists.

• ROBERT M. KIMBALL '33 has been appointed associate director for administration at the Los Alamos Scientific Laboratory, Los Alamos, New Mexico.

• JOHN L. FULLER '35 was elected a trustee of Bates College.

• JAMES LAWRENCE, Jr., '36 has been elected a trustee of Wellesley College.

• VINCENT L. MCKUSICK '47 has been named to the editorial board of the *Harvard Law Review*, an honor reserved for high-ranking students.

## ❧ HONORS ❧

• FRANKLIN W. HOBBS '89 was awarded an honorary degree of doctor of textile science by the University of North Carolina.

• EDWIN SUTERMEISTER '99 was awarded an honorary degree of doctor of science by the University of Maine.

• RALPH G. HUDSON '07 has received the James F. Lincoln Arc Welding Foundation award for notable contributions to engineering literature.

• CARL S. ELL '11 was presented the honorary degree of doctor of laws by Tufts College.

• JOHN D. COCHRANE, Jr., '23 received

the John Wesley Hyatt award for outstanding achievement in the plastics industry.

• HUNTER ROUSE '29 is the 1948 recipient of the George Westinghouse Award in Engineering Education, awarded by the American Society for Engineering Education, for distinguished contributions to the teaching of engineering students.

• ROBERT F. OLWELL '40 won two awards in the 1948 furnishing and decorating contest sponsored by the *Chicago Tribune*.

• EDUARD H. BULLERJAHN '43 was awarded the Swedish King's medal, the

highest Swedish award for architectural achievement, for his model house featuring exchangeable interiors and concentrated services.

• Medal for Merits were presented on June 9 by General Courtney H. Hodges and Rear Admiral Morton L. Deyo to the following scientists and engineers: WARREN K. LEWIS '05, EDWARD L. MORELAND '07, H. B. RICHMOND '14, BRIAN P. O'BRIEN '19, EARL P. STEVENSON '19, EDWARD L. BOWLES '22, JOHN E. BURCHARD '23, HOYT C. HOTTEL '24, THOMAS K. SHERWOOD '24, SAMUEL H. CALDWELL '25, BENNETT ARCHAMBAULT '32, IVAN A. GETTING '33, and HORACE S. FORD, staff.

## ❧ OBITUARY ❧

\*Mentioned in class notes.

C. FRANCIS ALLEN '72, June 6.  
FRANCIS B. CHADWICK '73, April 2, 1943.  
JOHN CABOT '75, May 12.  
RAPHAEL M. HOSEA '79, April 13.  
WILLIAM B. REVERE '81, May 21.  
ERNEST D. DORCHESTER '82, August 14, 1947.

EDWARD L. RAWSON '85, August 19.\*  
LOUIS E. REBER '85, May 12.\*  
CHARLES A. BARTON '87, June 16.\*  
FREDERICK A. KENDALL '87, July 9.\*  
JOSEPH T. WHITNEY '87, March 8, 1945.  
MANUEL DE AJURIA '88, date unknown.  
MAURICE DU PONT '88, in 1941.  
WALTER H. KILHAM '89, September 11.  
ARTHUR N. MANSFIELD '91, July 11.\*  
J. GIFFORD THOMPSON '91, August 19.\*  
W. SPENCER HUTCHINSON '92, May 25.  
WILBUR F. EVANS '93, May 24.\*  
CHARLES D. HEYWOOD '93, May 28.\*  
WALLACE C. LAMBERT '93, May 29.\*  
HARRY N. LATEY '93, July 11.\*  
SAMUEL H. BLAKE '94, August 24.  
PRESTON H. HASKELL '94, in 1931.  
WILLIAM H. PRATT '94, May 29.  
JOHN BOEDEKER '95, January 12, 1946.\*  
FRANCIS C. GREEN '95, August 17.\*  
FRANCOIS E. MATTHES '95, June 21.\*  
CHARLES E. LOCKE '96, September 24.\*  
GEORGE L. McELROY '96, date unknown.  
JAMES G. MELLISH '96, August 26.\*  
NATHAN H. SANDERSON '96, April 28.\*  
HARRY H. SMITH '96, May 24.  
STANLEY A. HOOKER '97, in June.\*  
FREDERICK D. LAMBERT '97, April 20.\*  
RALPH E. SAWYER '97, October 22, 1947.\*  
EDWARD A. SUMNER '97, May 2.

N. FLORENCE TREAT '98, December 13, 1943.

CLIFFORD M. BALKAM '99, May 14.  
FREDERICK O. CLAPP '99, May 23.  
HERBERT C. GREER '99, August 5.\*  
HARRY M. KEYS '99, date unknown.\*  
WALTER G. NOWELL '99, May 6.  
GARABED G. HECHINIAN '00, February 19.\*

GEORGE M. HOLBROOK '00, March 31.\*  
EDMUND H. PITCHER '00, July 21.\*  
LEROY M. BACKUS '01, June 18.\*  
HAROLD A. BESSE '02, date unknown.  
CHARLES J. BONNEMORT '02, July 4.\*  
CHARLES C. STOVER '02, July 27.\*  
GEORGE W. BATEMAN '03, April 13.  
ROGER A. BURR '03, July 19, 1945.  
L. FRED MYERS '03, October, 1947.  
LUCILE E. SARGENT '03, in January.  
ALEXANDER J. SCHOLTES '03, July 22.\*  
LAWRENCE H. UNDERWOOD '03, June 26.  
SELBY HAAR '04, September 5.  
HORACE J. MACINTIRE '05, July 15.  
RUSSELL WILLSON '05, July 6.  
CHARLES W. COFFIN '07, January 14.\*  
H. ROSS CALLAWAY '08, July 28.\*  
LESEUR T. COLLINS '08, July 31.\*  
ROBERT B. JEFFERS '09, June 3.  
EUGENE G. LUENING '09, date unknown.  
JOHN MILLS '09, June 14.\*  
WALTER F. HARVEY '12, March 27, 1947.\*  
DWIGHT M. WYMAN '12, July 18.\*  
JOHN BLATCHFORD '13, March 11.  
BORIS RAPOPORT '13, May 4.  
WALLACE BLANCHARD '16, July 19.\*  
JOHN R. BRADLEY '16, May 3.\*  
LEAVERETT BRADLEY '16, August, 1947.  
HENRY W. HASTINGS '16, July, 1946.  
RICHARD E. HEFLER '16, August 22.\*

ALEXANDER MARTIN, Jr., '16, April 19.\*  
ELMER S. TENNEY '17, January 24.  
BENJAMIN CARPENTER '18, September 24, 1947.

MILLARD KNOWLTON '18, May 4.  
THOMAS S. DERR '19, May 31.\*  
NOBUO YAMAMOTO '19, date unknown.  
GEORGE WALMSLEY '20, July 16.  
J. HENRI BAYLE '21, April 14.\*  
GEORGE FORDHAM '21, October 4, 1941.\*  
THOMAS F. HICKEY '21, June 16.\*  
HARRY R. SWANSON '21, July 24.\*  
ALBERT J. BROWNING '22, July 2.\*  
HARRY DIAMOND '22, June 21.\*  
RALPH M. SMITH '22, in 1942.  
FELIPE E. CADENAS '23, April 14.  
TONY L. HANNAH '25, April 30, 1947.  
BESSIE BURPEE '26, February 4.  
MAC SHORT '26, August 13.\*  
RALPH C. STIEFEL, Jr., '26, October, 1946.  
REGINALD W. BULKLEY '27, date unknown.\*  
FRANK L. VON BRECHT '27, February 8.\*  
LOUIS P. L'HOMME '29, April 12.  
JAMES A. LEIGHTON '30, in April.  
SAMUEL E. LAMBERT, Jr., '32, September 17.  
ARTHUR A. PISTILLI '33, May 17.  
CHARLES C. WILSON '35, August 12.  
KAISLEY BLAKE '36, May 18.  
FREDERICK H. SACHS '38, July 17.  
GEORGE W. KREBS '39, September 20.  
HARRY L. BLISS '40, March 25.  
NICHOLAS PICKARD '40, September 20.  
DAVIS W. BEAUMONT '42, August 25.  
ALEXANDER KANN, Jr., '44, September 14, 1944.  
RALPH R. SCHERER '45, May 12.



# News FROM THE Clubs AND Classes

## CLUB NOTES

### *The M.I.T. Club of Cuba*

After two preliminary meetings held early in 1946, a group of Alumni in Cuba met on May 16, 1946, for the purpose of organizing a regular alumni club. At that meeting, Manuel A. Cadenas '10 was elected president of the Club and a simple form of constitution was adopted. It was also decided at that time to request official recognition of our organization by the Alumni Association. In April, 1947, the executive committee of the Alumni Association officially recognized the Club. Since then it has become increasingly active, having had several reunions including one in honor of Harold E. Lobdell '17, Executive Vice-president of the Alumni Association, who visited Havana in November, 1947. Mr. Lobdell's visit last year and the recent visits of William H. Carlisle, Jr., '28 and Allen Scattergood to Havana, as well as numerous visits of club members to Cambridge, have helped greatly in establishing close contact with the Institute.

The third annual elections were held at the last meeting of the Club on May 28 and Antonio H. Rodriguez '21, who had succeeded Sr. Cadenas as president in May, 1947, was re-elected to that position. Also elected as officers of the Club were Miguel Amezaga '24, Vice-president; Antonio Badia '43, Secretary; Angel Figueroa '47, Treasurer; and Victor Carmona '43 Committeeman. — ANTONIO F. BADIA '43, *Secretary*, Badia and Company, Aguila 558, Havana, Cuba.

### *The M.I.T. Alumni Association of India*

The annual meeting, held in Bombay on March 25, 26, and 27, started with a luncheon at the Taj Mahal Hotel; about 40 members were in attendance with their wives. Amongst the guests invited and present were M. L. Dhanukar, Sheriff of Bombay; L. A. Bhatt of Messrs. Kilachand Devehand and Company; and Rasikal Chinoy of National Rayon Corporation. Kantilal H. Shah '38, as secretary, read out briefly the activities of the Association: The total strength of members is now 100; there were eight new additions since the last annual session; at present there are 14 students from India studying at M.I.T. From the registrar's report, the Secretary was happy to announce the standard of these students is very high and satisfactory. There are many more Indian students who are anxious to take advanced courses of training at the Institute, but owing to limited admissions many are not able to avail themselves of the facilities. Mr. Shah also referred to his recent visit

to the States and gave his observations regarding the trend on which American machinery and capital goods industry was developing. His speech was followed by remarks from Mr. Dhanukar, Dr. Bhatt, and Mr. Chinoy. Later in the afternoon, at a meeting amongst members only, Ram Prasad '22 spoke on "The Bombay Electric Grid System," and M. D. Parekh '38 gave a brief description of the rayon manufacturing process. On the following day, the members had an outing to Tansa Lake, about 70 miles northeast of Bombay, which is the main source of water supply to this city. The members again assembled for dinner on the 27th at the Cricket Club of India, with G. L. Mehta, President of the Indian Tariff Board, as chief guest. It was decided to form small committees to volunteer and prepare reports on problems which are now actively engaging the attention of the government authorities. For the selection of the problems a committee was formed consisting of S. M. Dhanukar, A. H. Pandya '31, M. D. Parekh '38, Ram Prasad '22, K. H. Shah '38, and T. M. Shah '29. It is expected that the next convention will be held at Delhi during the cold weather as the convention this year at Delhi was postponed because of abnormal conditions.

Three resolutions were passed at the meeting on March 27 as follows: 1. "This meeting of the M.I.T. Alumni Association of India is deeply grieved at the brutal assassination of one of world's greatest men and the father of the nation, Mahatma Gandhi, who by his teachings and able guidance in all spheres of life has raised the moral standard of the masses and has enabled us to win our independence within such a short time by non-violent methods." 2. "This first meeting of the M.I.T. Alumni Association of India after the Independence Day places on records their sense of responsibility and duty to the Nation. This Association therefore pledges to devote their attention to nation building activities particularly in the field of technical development." 3. "This meeting of the M.I.T. Alumni Association of India observes with concern the very little progress so far made by Government authorities in the urgent need for establishing at least one higher technical institute on the lines of M.I.T. for the training of technical personnel required for the development of the country. After securing our independence this need has become all the more urgent and we therefore request the Government to expedite the work of establishing such an institution. We also volunteer to offer co-operation in this work whenever required." — KANTILAL H. SHAH '38, *Secretary*, Vasant Industrial and Engineering Works, 470-71 Worli Road, Bombay 18, India.

### *M.I.T. Club of Milwaukee*

The Club concluded a very successful year with a most enjoyable picnic supper,

dance, and beach party at the Fox Point Beach Club on June 25. A few minutes were set aside during the festivities for a short business meeting. New officers for the coming year were elected as follows: President, Frank E. Briber, Jr., '43; Treasurer, William Mark '43; and Secretary, Charles L. Sollenberger '44. Plans for the coming year were made at an executive committee meeting on August 25. A committee was appointed to arrange the programs for five or six meetings during the year. — CHARLES L. SOLLENBERGER '44, *Secretary*, 924 East Wells Street, Milwaukee 2, Wisc.

### *The M.I.T. Club of the Philippines*

Through the combined action of Jose B. Cortes '42 and Ramon A. Sevilla '39 in having advance announcements printed in the Manila papers, a dinner meeting was held at the Selecta Restaurant in Manila on the evening of June 18; the first alumni gathering of the Manila group since the War. Our Club had been badly disrupted and this was in the nature of a re-organization meeting.

The attendance of nineteen Alumni consisted of three Americans and sixteen Filipinos, as follows: Jose C. Espinosa '22, Emilio del Prado '24, Feliciano T. Roque '25, Juan T. Villanueva '26, Gregorio Y. Zara '26, dean and vice-president of FEATI Institute of Technology; Manuel Liwanag '27, Felix B. Padilla '30, Cornelius Van S. Roosevelt '38, grandson of the late President, Theodore Roosevelt; Antonio W. Diokno '39, Tomas de los Reyes '39, Ramon S. Sevilla '39, Cesar H. Concio '40, consultant architect of the University of the Philippines and member of the architect mission to the United States and South America; Rafael T. Simpaio '40, John P. Webber '41, Jose B. Cortes '42 of the Philippine weather bureau; Antonio C. Kayanan '42, Luis H. Lim '42, Miguel R. Unson '42 and Gordon Hundedby '43. The reunion was marked with feelings of comradeship and joy, fond recollections of old college days, and the formation of new friendships between the old members and the newcomers. Unfortunately, Jose E. Olivares '26, Lieutenant Colonel, U.S.A., who was previously president of the Manila Club, could not be located. Miguel R. Unson '42, Secretary, was present. Cesar H. Concio '40 acted as presiding officer at the meeting and John P. Webber '41 of the United States weather bureau mission in the Philippines was the guest speaker. Later in the evening a committee of seven members, with Mr. Unson as chairman, was chosen to make plans for a general meeting of Alumni in Manila and nearby provinces to be held in the near future for the purpose of electing new officers. In the meantime, the Club is carrying on with Cesar

H. Concio '40, 3d Floor, Samanillo Building, Escolata, Manila, as acting president and Miguel R. Unson '42, Glass Factory, San Miguel Brewery, Manila, as secretary. In his talk, Mr. Webber dealt particularly with rain-making experiments, with special application to the Philippines. He explained the various factors which have to be considered before any attempt can be made to produce precipitation. — MIGUEL R. UNSON '42, *Secretary*, Glass Factory, San Miguel Brewery, Manila, P.I.

### **The M.I.T. Club of Quebec**

The annual general meeting and dinner of the Club was held on May 11 at the Ritz Carlton Hotel, in Montreal. We had the pleasure of hearing the Right Honorable Clarence D. Howe, Minister of Trade and Commerce in the Canadian Government, discuss the atomic energy plant of Chalk River, and peaceful uses of isotopes and radiation techniques.

Preceding Mr. Howe's talk, the minutes of the previous general meeting, the financial report and the report of the executive committee for the year 1947-1948 were adopted as read. Florian Leroux '45 and Thomas L. Brock '38 were chosen as auditors of the club's books. Nominations of Harold C. Pearson '23 for president, and of Alexander D. Ross '22 and Leon A. Fraikin '31 for councilors, resulted in their election to these posts. The executive committee of the Club for the year 1948-1949 is composed as follows: President: Harold C. Pearson '23; Vice-president: Paul Kellogg '11; Secretary-Treasurer: Jacques Laurence '40; Councilors: term expiring in 1949, A. T. Eric Smith '21 and François P. Rousseau '27; term expiring in 1950, René Simard '28 and F. David Mathias '36; term expiring in 1951, Alexander D. Ross '22 and Leon A. Fraikin '31.

Alumni attending the meeting, most of them with their wives, were: H. A. Audet '45, Q. R. Ball '46, P. F. Beaudry '21, Thomas Bernier '28, J. A. Campbell '36, M. L. Carey '23, H. S. Chandler '08, Albert Cholette '43, Aimé Cousineau '16, L. J. T. Décaré '05, A. V. Dumas '20, L. A. Fraikin '31, F. J. Friedman '08, Augustin Frigon '11, Henri Gaudet '34, Maurice Gérin '21, E. N. Gougeon '25, E. R. Hammond '39, W. S. Hart '00, Bernard Héti '49, C. D. Howe '07, S. J. Hungerford '33, H. N. Karr '34, Paul Kellogg '11, T. J. Lafrenière '11, F. S. Lamoreux '24, J. L. E. Langevin '30, René Laplante '30, Jacques Laurence '40, F. G. Leroux '45, D. E. MacNair '50, G. K. Marshall '41, J. C. R. Martin '39, Huet Massue '15, F. D. Mathias '36, M. W. Maxwell '23, A. N. Miller '39, Humphreys Milliken '02, W. K. Nonnenman '36, L. McI. Orrock '32, W. J. Peard, Jr., '11, H. C. Pearson '23, J. R. Portelance '37, H. A. Rapelye '08, J. M. Raymond '34, E. C. Richardson '07, C. A. Robb '10, A. D. Ross '22, J. K. Ross '40, Mrs. J. K. Ross '40, F. P. Rousseau '27, G. E. Rousseau '25, J. J. Rowan '36, H. H. Schwartz '42, A. T. E. Smith '21, R. S. Sproule '47, J. N. Stephenson '09, and G. L. White '23. — JACQUES R. LAURENCE '40, *Secretary*, École Polytechnique, 1430 St. Denis Street, Montreal 18, P.Q., Canada.

### **M.I.T. Club of St. Louis**

Approximately 150 Alumni and guests gathered on July 24 for our annual picnic outing at the luxurious home overlooking the Missouri River of Francis Mesker '27, and Mrs. Mesker. Afternoon activities included swimming, tennis, card playing, and reminiscing. Ample refreshments were provided. Following a barbecue, some 50 attendance prizes, donated by companies with which various local Alumni are associated, were awarded. The electric cable car, used to transport guests from the main house to the river and pool about 100 feet below, provided an interesting afternoon attraction for the guests. A showing of several sound movies brought the enjoyable afternoon and evening to a close. The four winners of the St. Louis-area freshman scholarships and about 10 undergraduates now attending the Institute were present as guests of the Club. This was the only major social activity of the Club for the summer, but another large gathering is planned for the annual meeting in November. — LAURENCE P. RUSSE '41, *Secretary*, 5247 Westminster Place, St. Louis 8, Mo.

### **M.I.T. Club of Schenectady**

The steering committee met at a luncheon September 13 to discuss plans for the coming year. It was decided to hold more evening meetings, which will permit a greater variety of social functions, as well as giving the out-of-town members an opportunity to be with us. It was also decided to investigate the possibilities of club participation in some form of civic activity; the available openings for such work will be presented to the members at the October meeting. Our schedule, at present, is as follows: luncheon meetings in October, February, and May; evening meetings (with speakers) in November and January; a social evening in March; and an outing in the spring or early summer.

Members of the steering committee for the year are Charlie Barrett '34, Hal Chestnut '39, Ivor Collins '41, Leo Dee '35, Joe Quill '41, Will Rodeman '44, Rea Stanhouse '41, and Ben Thorn '41. — The club scholarship drive, which was carried on during the summer, was very successful; more than \$540 was collected, all by direct contribution. We plan to augment the Krueger fund with most of the money, perhaps leaving some with which to organize a fund-raising event. — The club elections were also held during the summer. Joe Quill stepped up from secretary to president, and Ivor Collins became secretary. To Hal Chestnut, our former president, now serving on the steering committee we say many thanks. — IVOR W. COLLINS '41, *Secretary*, General Electric Company, Building 56-201, 1 River Road, Schenectady 5, N.Y.

### **M.I.T. Club of Southern California**

Featured by the installation of new officers, the Club held a dinner meeting June 14, at Plummer Park, 7377 Santa Monica Boulevard, Hollywood, Calif. The speaker of the evening was Henry A. Babcock '12 who has gained considerable prominence

by his bold and masterful plan for mass transportation in the Los Angeles area. So important was the meeting considered in the light of civic betterment that Fletcher Bowron, Mayor of Los Angeles, and the head of the city planning commission attended. Babcock's plan would relegate all surface busses and cars to a district outside of 75 square miles, including downtown Los Angeles, Beverly Hills, Pasadena, and adjacent areas. Helmut Geyer '26 was in charge of the meeting in place of our chairman, Phil Bates '29, who was out of town. Hiram Beebe '10 is the new secretary and George Cunningham '27 is treasurer. Dues of \$2.00 per year are being received and donations are accepted. A new section directory, or at least a supplement to the 1946 section directory is being planned, and there are now over \$200 in the club treasury for expenses.

Among the more than 60 present at the June meeting were the following: M. A. Abel '41, W. H. Adams '03, R. L. Alder '37, J. M. Andreas '37, H. A. Babcock '12, H. E. Beebe '10, T. W. Brockenbrough '46, A. D. Carothers '24, L. E. Clark '25, R. W. Conant '23, H. E. Crossley '47, F. G. Denison, Jr., '40, Arthur Esner '21, R. R. Favreau '45, J. S. Gallagher '15, H. W. Geyer '26, H. L. Golden '38, J. D. Goldson '47, M. F. Graupner '12, L. C. Hampton '07, I. E. Hattis '34, Rodman Jenkins '46, K. D. Kahn '15, Lawrence Kanters '36, J. L. Kaufman '44, H. A. Kely '28, H. B. Leslie '38, A. M. Liff '24, J. P. Livadary '22, C. L. Maltby '22, H. J. Mann '06, William Mellema '15, H. M. Morley '03, F. B. Morton '13, W. K. Overturf '40 and Mrs. Overturf, J. B. Pitkin '37, F. M. Post '21 and son, Harry Postal '25, E. L. Scharnikow '24, M. J. Smith '13, O. K. Smith '40, R. B. Stringfield '15, J. E. Whitman '49, P. G. Whitman '13, D. D. Weir '38, J. G. Zeitlen '39.

In the absence of President Bates '29, H. W. Geyer '26 presided at the luncheon on August 13 held in the Redwood Room of the Savoy Hotel. Sam Eskin '26, R. B. Stringfield '15, in charge of placements, and your Secretary were present to discuss the progress of the Club and its work concerning placements. Our guest was R. W. Clyne '30 of American Steel Foundries of Chicago, who is in charge of placements for the M.I.T. Club of Chicago. The Chicago Club has a placement committee consisting of 10 men who are leaders in various industries. They have placed 75 men in the past two and one-half years, accommodating men who wished to change their positions and men who came directly from the Institute. — HIRAM E. BEEBE '10, *Secretary*, 1847 North Wilcox Avenue, Hollywood 28, Calif.

### **The M.I.T. Club of New York**

The annual banquet of the Club will be held at the Biltmore Hotel on December 7, in honor of C. George Dandrow '22, President of the Alumni Association. R. E. Wilson '16 will be toastmaster. L. B. Davis '22 is general chairman of the committee, and A. L. Bruneau, Jr., '38 is in charge of ticket sales. More details will appear in the December issue. — WILLIAM W. QUARLES '24, *Secretary*, 330 West 42d Street, New York 18, N.Y.



## CLASS NOTES

### • 1885 •

I have just learned of the passing of Louis Ehrhart Reber, a versatile man of great ability. I regret that my acquaintance with him was only by correspondence. He was born in Nittany, Pa., on February 27, 1858 and died at West Palm Beach, Fla., on May 12. Dean Reber graduated with honors from the Pennsylvania State College from which he received the B.S., M.S., and D.Sc. degrees. He became an instructor in mathematics there and later took a postgraduate course at Technology in 1883-1884. He was dean of engineering at Pennsylvania State College from 1895 to 1907, then director, and later dean of the extension division of the University of Wisconsin, holding this post until he became dean emeritus in 1926. Early in his career in Wisconsin, Dean Reber became interested in the work of the late Dr. Hoyt E. Dearholt, which led to the organization of the Wisconsin Anti-Tuberculosis Association. An active member of that group of physicians and laymen, he came in contact with able professional and public spirited men and women bending their energies toward the prevention and cure of this widespread disease. It was not until World War I that definite opportunities arose for the fulfillment of a program to bring university extension into the medical field. The scarcity of nurses, caused by the entrance of graduate nurses into government service, became a serious matter. Dean Reber and Dr. Dearholt suggested to the members of the state council of defense representing the medical profession that a short course for the training of nurses be instituted. This was done by the state and such women were designated as Health Aids.

He was a commissioner for Pennsylvania at the Paris Exposition in 1889. At the Columbian Exposition in Chicago in 1893, he was assistant executive commissioner in charge of mining and manufacturing and also a member of the Jury of Awards. At the Louisiana Purchase Exposition in 1903, he was awarded a special gold medal for the best exhibit on state mining. During World War I, Dean Reber, on leave of absence from the University of Wisconsin, was made director of education and training in the Emergency Fleet Corporation. After the Armistice he was appointed director of trade education and engineering for the American Expeditionary Force schools established throughout the Army in France. He took direct charge of the engineering college of the American Expeditionary Force University at Beaune. The placing of American Expeditionary Force engineering students in French and English universities and technical schools also came under Dean Reber's supervision. The entire program was a great success and its organizer was made an officer of the French Academy. He was the founder and first president of the National University Extension Association, charter member of the Society

for the Promotion of Engineering Education (now the American Society for Engineering Education), and a member of many engineering and educational societies.

The following is quoted from *Technology's War Record*, a volume commemorating the Institute's role in World War I: "The Shipping Board was also obliged to develop an educational organization, and here again a Tech man was placed in charge. This man was Louis E. Reber '85, whose work in connection with the educational program of the American Expeditionary Forces has already been mentioned. . . . In August, 1917, Reber had become associate director, Public Reserve, United States Labor Department, being associated with Roger W. Babson, '98, Professor D. R. Dewey, I. W. Litchfield, '85, Professor H. W. Tyler, '84, and other Tech men. In April, 1918, he became director of Education and Training for the Emergency Fleet Corporation. . . ." From this same publication, we quote the following, listed in the register of civilian records section: "Reber, L. E. (II) Assoc. Director, Public Reserve, U.S. Labor Dept., Aug. '17-Mch. '18; Director, Education and Training, U.S. Shipping Bd., Emergency Fleet Corp., Apr. '18-15 Dec. '18; Director, Engineering and Trade Education, Y.M.C.A. Army Educational Comm., France, Dec. '18-July '19 (Educational Comm. of Y.M.C.A., became Army Educational Corps, Apr. '19); Director, College of Engineering, A.E.F. University at Beaune, France. Decorated by French Govt. and made an Officer of the Académie."

The following is quoted from a newspaper clipping: "Edward Lincoln Rawson [II] '83, one of the best known architects and mechanical engineers in Boston, died . . . [August 19]. Mr. Rawson was born in Charlestown, Nov. 8, 1864, and his earliest education was in a private school in Norridgewock, Me. He graduated from Somerville High School and . . . Technology. . . . For the next 63 years he led an extraordinarily busy life in his chosen career. He spent a year as a mechanical draftsman in the Rhode Island Locomotive Works, in Providence. The next four years were spent in Los Angeles as civil engineer and surveyor, and as assistant engineer in the construction of the San Diego Cable Railroad. He was back in Boston in 1890, and served as mechanical draftsman with the Thomson-Houston Company in Lynn, and the Edison Electric Illuminating Company of Boston. He was assistant engineer in the construction of Battery Wharf and Edison Wharf in Boston. He spent three years as superintendent of construction for Winslow and Wetheral (later Winslow and Bigelow), supervising the steel structural work for more than 100 buildings in various parts of the country. For the past 40 years he conducted his own business as architect and engineer. After the fire on Long Wharf he rebuilt that wharf, as he did also Tudor Wharf in Charlestown, and supervised the piling and construction of seawalls, trusses, and foundations of many wharves in Boston. For many years he had been in charge of architectural construction of all the Boston Globe proper-

ties, which included alterations and foundations for eight of the mammoth presses used in printing the Globe. For the New England Power Company he was in charge of constructing many buildings for the gas companies in North Adams, Northampton, Milford, Leominster, and Gloucester. His home was at 72 Clyde Street, Newtonville. He is survived by his wife, the former Anna Merritt of Hingham." He was a genial man and loyal to his Class. He attended all class meetings. — ARTHUR K. HUNT, *Secretary*, Longwood Towers, Brookline 46, Mass.

### • 1886 •

The Secretary wishes to make a correction of earlier '86 Class Notes wherein James C. Duff was reported as recuperating at the home of his son, Dr. Paul Duff. Duff informs me that Dr. Paul Duff is his nephew, not his son, and that he, James C., has never married. The Secretary apologizes for the error and wonders if Mark Twain's statement, "The crime resides in the intention," would apply in this case. Perhaps our chalk-throwing alumnus once intended to become a benedict, in which case, according to Mark, he is married and doesn't know it! A post card from Duff calls the Secretary's attention to his new address, Hammond Hall, Gloucester, Mass. As he has been ill and living under the care of his nephew, it would seem that his health must be improved.

A recent letter from John W. Killinger, Jr., in answer to a card directed to our classmate of the same name, states that his father (S.M.A. '86), who had been active in his profession, notwithstanding his advanced age, was hit by an automobile last April as he was leaving a street car in San Francisco and received multiple injuries which required hospitalization for six weeks. Since then he has been with his son in Napa, Calif. The injuries included a concussion, broken collar bone, broken arm, and an eye injury. The son reports that his father is recovering and will write when he is able.

No details from Clifford have come to hand yet. I suggest again that '86 members urge him to open up, saying they would like to hear what he is doing.

Your Secretary attended the annual meeting of the Alumni on June 12 and was the only representative of either M.I.T. or S.M.A. '86. Of the earlier classes there were only two representatives at the luncheon in the court; one from '82 and one from '84. Only the '84 man attended the evening banquet at the Hotel Statler, which brings our Class very near the head of the list. The symposium on "Logistics of Peace" was fine both in respect to the attitude of the three speakers toward peace and in the treatment of the subjects. Your Secretary was careful with his stein and the contents. His row of steins now numbers seven, covering the years 1948, 1947, 1946, 1942, 1940, 1939, 1938, and he hopes to include 1949 and 1950 before turning his work over to secretary number three.

Your Secretary has received a request from the Alumni office for information as to the address of Frederick W. Perkins. Our former Secretary, Arthur Robbins, has

his name on a card under date of 1914 stating that Perkins' mail was returned from 64 East Van Buren Street, Chicago. Any member of '86 who has any knowledge of his present whereabouts is requested to please communicate with me at Post Office Box 4, Island Creek, Mass.

A short letter has been received from Ambrose Walker dated July 3 in answer to one from me asking for more details as to his recent activities. He is confining them to journeying from Massachusetts to Florida, spending his winters in the South and summers in New England. What he does in Florida and New England he leaves to our imagination. We would all like to know how our aged and venerable members occupy their time now that they are not in active business.

The Secretary had a bad tumble the last of July that kept him inactive for several weeks. Osteopathic treatments and much resting have greatly improved him, and he can get about fairly comfortably once more. The doctor remarked that "old folks" should not stand on chairs and reach up to get boxes from high shelves!

No word from Harry Clifford yet. Isn't he the limit? — ARTHUR T. CHASE, *Secretary*, Island Creek, Mass.

## • 1887 •

We are in receipt of a letter from Mrs. Granger Whitney, of 8100 East Jefferson Avenue, Detroit, Mich., who is a subscriber to *The Review* and scans our Class Notes together with news of the M.I.T. Club of Chicago. After his graduation, Granger was superintendent of blast furnaces in South Chicago and also active in local society. The last thirty years of his life were spent in Detroit and at his Michigan apple orchard. — We expected George Sever at our 55th reunion in Plymouth as his home is in the adjoining town of Kingston. He did not come, however, so some of our group drove to his home. The house was closed and a neighbor told us that George was ill and had gone to a nursing home. This year we have heard from him at his home town of Kingston. His address is in care of Mrs. Dennings. — Reunions are generally held at five- or ten-year intervals and as our 60th last year was such a success no effort was made this year to plan for a 61st. Our President, Richard E. Schmidt, had to go to Wisconsin to attend the wedding of his only grandson, and Ames Carter's wife was laid up with a broken ankle bone. Such alibis are reasonable so your Secretary was the only '87 man to attend the interesting affairs in connection with the 1948 commencement. The trip from, and the return to Chicago are always interesting at that time for one finds other M.I.T. men as very agreeable traveling companions, and conversation never lags.

The death of Frederick Kendall was not unexpected as he had been in poor health for a long time and was so feeble when he attended our 60th reunion last year he could walk only when supported. His elder brother, Henry H. Kendall '76, was a successful Boston architect and Fred worked in his office for several years before entering Technology. As one of the two-year special students, he was the oldest man in our Class. Although his hair

was black there was a small streak of white over his forehead in sharp contrast with the rest. One of his classmates once said to him, "I can't tell whether you are a young old man or an old young man." In his latter years, during the administration of President Hoover, Fred was librarian of the Department of State at Washington. His last years were spent in retirement at the home of his relatives in Newton. He attended many of our recent reunions and was always a most companionable friend. He passed away on July 9.

We have notice from the Brooklyn *Eagle* of June 18 of the funeral of Charles A. Barton, II, retired vice-president of the Consolidated Edison Company. He was born in London and came to the United States at the age of 11. His later career was entirely with electric light and power companies until the last consolidation took place. The newspaper article listed his age as 90 years old. This may be in error for he did not seem to be 29 years old at the time of our graduation. Surviving are his widow, Mabel Macdonald Barton; two sons, Donald R., and Dr. Charles R. Barton; and a sister, Mrs. Minnie Jackson. — LONSDALE GREEN, *Secretary*, 5639 Kenwood Avenue, Chicago 37, Ill.

## • 1888 •

At the annual stockholders' meeting of the Great Chebeague Golf Club held on August 21, your Secretary was re-elected a director for the next year as well as clerk of the corporation. He has served in both positions for many years. — BERTRAND R. T. COLLINS, *Secretary*, 291 Nassau Street, Princeton, N.J.

## • 1891 •

Our classmate and friend, Arthur N. Mansfield, died at his home in Reading, Mass., on July 11. He was a loyal member of our Class and attended most of our reunions and dinners, but was unable to attend this year because of illness. The following is from the *Reading Chronicle*: "A native of Wakefield, he was educated in the schools of that town and graduated from M.I.T. . . . He was with the American Telephone Co. for about 20 years in New York and Boston, but he later went into the coal business and at the time of his retirement a few years ago was treasurer and comptroller of Batchelder and Whittemore Coal Co. of Boston. He was active in civic affairs for a number of years and served terms on the School Board and the Board of Library Trustees. . . . He married in Reading, Frances Smith, who passed on a few years ago. He is survived by a brother, Stanley A. of Melrose Highlands."

We regret to report the death of J. Gifford Thompson who passed on August 19 at a Worcester hospital. He had been ill for several years and confined to his apartment on Harvard Street in Brookline. He attended some of our reunions and dinners, but not recently. Harry Young and Ernest Tappan attended the funeral. He was born in Roxbury, Mass. Until the time of his parents' death, he lived at 15 Moreland Street, Roxbury, then for several years at the Hotel Warren. He graduated from the Boston English High School,

and after leaving Technology, he went into business with his father who was senior partner of the publishing house of Thompson, Brown and Company. This firm went out of business sometime around 1920. Giff retired and continued his hobbies of photography, travel, lecturing, and so forth. He traveled extensively in Canada, Europe, South America, the West Indies, and took a trip around the world. He never married. His only living relative is a cousin, Mrs. Charles A. Clark, of Newton Highlands, Mass. He was one of the founders of Phi Beta Epsilon in 1890.

Walter Hopton wrote in September from Syracuse of his gradual slowing down in business and travel. The following is from his letter: Last month Lester Charles, his family, and I had a two-weeks vacation at Webster Lake in Dorothy Johnson's log cabins. It was most pleasant and restful. I had not been there since 1939. Mrs. Aiken and Dan were there and added to the enjoyment. Dorothy is doing a fine job, with about 50 congenial guests from various states. She serves a variety of excellent food. I think my son is going there again next year, taking me along if I am able to go." [Secretary's note: Lester Charles is Walter's son, M.I.T. '26, named for two '91 men, Lester French and Charles Aiken. Dorothy Johnson is Charlie Aiken's daughter who has an elaborate restaurant and log cabins on Webster Lake, near Franklin, N.H.]

A letter from Gorham Dana written in July reads in part as follows: "I am having a good summer here, and am feeling much better. I work in the garden each morning and rest in the afternoon. I bathe in the lake, but do not walk much. Dr. Denny next door is not well this summer and has to keep very quiet. I had a nice call from Frank Howard awhile ago. He was planning a trip to the Tennessee Valley Authority project this summer, but said it had been given up. He is a member of the state planning board and I am trying to persuade him that the proposed belt-line road around Boston should go through Park Drive and Audubon Circle with a width of four lanes instead of through Armory Playground and Hawes Street with a width of six lanes. The latter route would cross the railroad near the Longwood Station and would not be very desirable for Longwood Towers."

A letter of May 29 to Gorham Dana from Robert Ball in Cambridge, England, reads in part as follows: "You were in my thoughts on April 30. It is a credit to our class constitution that so many were able to attend, and I should have liked to swap yarns with you all and hear the news. Harry Young as president is a good choice. I should like to have had a visit from Howard. This town has not suffered yet from the planners but threatens any day to be a victim. There is very strong feeling here about interfering with the amenities of these old and picturesque places. You must not think I am opposed to operations on a town, or vacant sites, when they are to replace ugliness or unsuitability to the age we live in, but the heavy hand of the planner has been ill-directed and it makes us cautious and critical. Your John Hancock settlement will no doubt be an ornament. What a great boon hot water



heating is! Would that we had it more generally. We have it in this house, but we have not discarded the open fire! Coke is the fuel. All articles and costs of accommodations, such as house rents, keep rising without a pause. When it will stop nobody knows. In foreign policy there is this to be said, 'there is no policy.' This appears to be a catalogue of complaints, but there are benefits which cancel them out, and for old people like my wife and me, we get along quite comfortably. Travel, both in England and across the channel, is beset with difficulties and restrictions to avoid. Therefore, we stay at home or take our car to some resort on this Island. My daughter and family are still in Kenya and are enjoying that superb climate. My son-in-law is a civil engineer."

The Fiske family were much pleased to attend the wedding of their grandson, Donald Cass, to Marion Philbrook, both of Winchester, Mass., on August 29. This may be an old and frequent story to some of our classmates, but the first occurrence for us. — HENRY A. FISKE, *Secretary*, Grinnell Company, Inc., 260 West Exchange Street, Providence, R.I.

## • 1892 •

Harry Carlson was the commencement speaker at the graduation exercises of the Lowell Institute School on May 26. The Secretary regrets that he was unable to attend the exercises but is informed that Carlson gave an outstanding address. Carlson and the Secretary were the only representatives of the Class at the Alumni Banquet in June. Carlson also informs me that he saw Hall in his new home in Lanesville, Mass., which is in a very attractive locality with a broad view across Ipswich Bay.

Our Class President, George H. Ingraham, has a series of landscapes in water color and oil on exhibition in the Marblehead Arts Association at King Hooper Mansion from October 5 to October 30. The paintings include landscapes of New England, North Africa, Spain, and the Northwest.

Channing Wells is the nominee for the job of Class Agent for the Alumni Fund to succeed Ralph Sweetser, who, after serving the Class for many years, was obliged to resign a year ago because of his health. We sincerely hope that Wells will be able to accept the position and a letter from a classmate addressed to him as Trustee, American Optical Company, Southbridge, Mass., will no doubt be helpful in persuading him to accept. — CHARLES E. FULLER, *Secretary*, Post Office Box 144, Wellesley 81, Mass.

## • 1893 •

The 55th anniversary meeting of the Class of '93 was held at the Country Club, Brookline, on June 11. Members of the Class present included: Jesse B. Baxter, Maurice B. Biscoe, Joshua B. Blair, Leonard B. Buchanan, John S. Codman, Herbert N. Dawes, George B. Glidden, Arthur H. Jameson, Frederic H. Keyes, William F. Lamb, Harry M. Latham, Edmund I. Leeds, Edward Page, Edward S. Page, Cecil E. Paine, Arthur S. Pevear, Arthur A. Shurcliff, Charles M. Spofford, Charles

M. Taylor, John F. Tomfohrde, Augustus B. Wadsworth, and William C. Whiston.

We had hoped to have Dr. Compton with us again this year but his dinner for the Honorary Secretaries of the Alumni Association, scheduled for the same date, prevented his being with us. A brief business meeting was held immediately following a delicious semibuffet luncheon. Pursuant to the recommendations of a carefully selected nominating committee, all of our class officers were unanimously re-elected for the ensuing year. As our guest and after-dinner speaker we were very fortunate in having with us Clark Goodman '40, Associate Professor of Physics at the Institute. His personal contact with scientific research in the field of nuclear science qualified him to speak with authority on this timely subject. With the aid of specially prepared charts and lantern slides, he reviewed the discoveries and practical application of the knowledge obtained in this field during the time since our graduation in 1893.

A letter dated June 10 addressed to the Secretary from Rigby Wason, Highfield, Totland Bay, Isle of Wight, and received too late for presentation at our reunion reads as follows: "The notice of our 55th reunion has just reached me and I will be thinking of you all tomorrow. The government requisitioned my town house from me in 1944, and out I had to turn neck and crop, in a hurry, and they are still in possession. I had to sell many of my treasured possessions at a great loss, but that was just the rub of the green. I had no room for them all here at our country place, and putting them into storage would have just meant ruination in a damp climate, and an unheated warehouse. But the point is not how much better off we might all be, but how much worse. We had a narrow squeak and Providence protected us in sending your great country to our aid. . . ."

During the summer the following interesting information was received regarding the business and technical activities of our classmate, Toros Torossian, in Iran. His work during the periods of 1899 to 1907 and 1934 to 1939 included the building of highways, and a portion of the Transiranian Railway. He also served as personal engineer to the Shah, director of a building company, and consulting engineer. Various articles of his dealing with construction in Iran have been published in *London Engineering* and other technical magazines. He has prepared a book of about 75,000 words dealing with the agricultural resources, mineral wealth, and the industrial possibilities of Iran — for which he is seeking a publisher.

Wallace C. Lambert passed away at his home in Gleasondale on May 29, having reached the age of 79 years the day before. Born in Lowell he had made his home in Stow for 46 years, where he was a well-known orchardist, and a member of the Unitarian Church. He graduated from the Institute with the degree of bachelor of science in Civil Engineering and was a member of the American Society of Civil Engineers. He is survived by his wife, Martha (Bowles), three sons, eleven grandchildren, four great grandchildren and a brother, Dr. John H. Lambert of Lowell.

A daughter, the late Mrs. Hester Emerson, passed away last June.

Private funeral services for Charles D. Heywood, who died in Holyoke May 28, at the age of 77 years, were held at his home on May 30. A graduate of Phillips Exeter Academy, he entered the Institute with our Class and took the Course in Mechanical Engineering. He was a former president of the Holyoke Machine Company, treasurer of the Walsh Boiler Works, and trustee of the Holyoke Savings Bank for 40 years. He was a member of the William Whiting Lodge of Masons, and is survived by his wife, the former Julia Fay, a daughter, and three sisters.

Wilbur Forbes Evans, born in Springfield, Mass., December 2, 1869, died at his home in Waban, Mass., on May 24. He entered the Institute with our Class, but during the sophomore year transferred to Cornell where he graduated with a degree in mechanical engineering in 1893. He founded the Electric Maintenance Company of Boston, February 16, 1898, and was vice-president of the company at the time of his death, having retired as president in 1933.

Harold Anthony Richmond, born in Brooklyn, New York, January 3, 1871, died April 8, in Niagara Falls, New York. He joined our Class in our junior year having previously studied at the Sheffield Scientific School, Yale University, from 1888 to 1890. Following graduation he was employed as draughtsman by George F. Simmonds, at Fitchburg, Mass., on the development of a new type of ball bearing for the axles of carriages and street cars. Within a year Henry M. Whitney bought the business and moved it to Boston. Richmond was then made successively superintendent, treasurer, and manager of the Ball Bearing Company which designed and sold the first ball bearings used on machine tools and screw propellers. In 1897 he bought from A. B. Smith (at that time director of the Technology machine shop on Garrison Street) an embryo grinding wheel company, and spent the next 20 years developing the business in Providence, R.I. During this time he became vice-president and director of the Universal Grinding Machine Company, and secretary of the Richmond Land Company. In 1915 he helped to organize the General Abrasives Company of Niagara Falls, N.Y. He had been actively interested in this company since 1923, and was chairman of the board at the time of his death.

He had been president of the American Emery Wheel Company of Providence; treasurer of the Lionite Abrasives, Ltd.; treasurer of the Crouch Mining Company; and president and general manager of the Warner Mining Company of Georgia. Richmond had patented processes for the manufacture of artificial corundum and written various articles for the technical press on ball bearings and abrasives. At Sheffield he was a member of the Delta Phi Fraternity and editor of the *Yale Courant*. Here at the Institute he was a member of the Hammer and Tongs and K.O.S. societies, and served on the editorial board of *The Tech*. He was a member of the American Society of Mechanical Engineers, University Club of Providence,

Niagara Club and Niagara Falls Country Club. In 1909 he traveled extensively in Europe. His recreations were farming and golf. By his first wife Evelyn L. Kimball, whom he married in April, 1895, he had a daughter, Margaret, and by his second marriage to Mary C. Strasburg in 1923, he had two sons, and at the time of our 50th anniversary reunion he reported three grandchildren.

Immediately following the death of Harry Nelson Lathey at his home in New York City on July 11, the Board of Transportation of the city of New York released the following statement covering his activity since graduating from the Institute: "Mr. Lathey was born in Omaha, Nebraska, October 14, 1870. He attended the Smith Academy in St. Louis and was graduated by the academy in 1889. Thereafter, he attended . . . Technology and graduated . . . with a degree of Bachelor of Science in electrical engineering. Mr. Lathey's electrical career began with the Westinghouse Electric and Manufacturing Company in Pittsburgh in 1893. Five years later, he became the Assistant Engineer of the Manhattan Elevated Railway Company in New York and was in charge of the electrification of New York's old steam-powered lines. When the Interborough Rapid Transit Company started to make its plans for the first subway 44 years ago, Mr. Lathey was the Electrical Engineer of both subway and elevated systems. From 1906 to 1912, he ventured into private business as a senior partner in the firm of Lathey and Slater, railroad engineers and constructors. Subsequently, he was a Special Engineer in charge of sales and engineering for the General Electric Company and for a time thereafter was the Electrical Engineer for B. F. Wood, Inc. Mr. Lathey came to the State Transit Commission in 1920 as the Electrical Engineer in charge of the Equipment Division. He was a consultant on the electrical equipment of the Hudson and Manhattan Tubes and the Williamsburg Bridge. When the Board of Transportation absorbed the Transit Commission in 1924, Mr. Lathey became Chief Engineer of the Division of Equipment and Operation.

"In 1942, when Chairman John H. Delaney of the Board of Transportation requested the New York City Retirement System to continue Mr. Lathey in service at the age of 72, Chairman Delaney wrote to the Board of Estimate, 'His services are as nearly indispensable at this time as any person's services can be indispensable. He is in good health and vigorous in all of his faculties. Mr. Lathey has been in close contact with rapid transit developments of this City since 1898, practically the beginning of electrical operation. He was the first electrical engineer of the Interborough Rapid Transit Company and has been responsible for much of the development in rapid transit equipment. For the IND Subway System alone, he has prepared and supervised contracts amounting to \$125,000,000. The Board of Transportation is of the opinion that in view of the importance of the work indicated above, an engineer of his ability and experience is essential.' . . . He was a member of the American Society of Civil Engineers; a

Fellow of the American Institute of Electrical Engineers; a member of the Railroad Club, Engineers Club, and Phi Gamma Delta Fraternity." — FREDERIC H. KEYES, Secretary, Room 5-213, M.I.T., Cambridge 39, Mass. GEORGE B. GLIDDEN, Assistant Secretary, 511 Tremont Street, Boston 16, Mass.

## • 1895 •

Francois Emile Matthes died June 21, aged 74, at his home in El Cerrito, near Berkeley, Calif., to which he had retired about a year ago after 51 years of service with the United States Geological Survey, first as a topographer, later as a geologist. He was by nature a scientist. He took a postgraduate course in geology from 1904 to 1905 at Harvard, and while there lectured as an Austin Teaching Fellow. During the last 10 years he had become an internationally recognized authority on glaciers. Early in his career, because of his painstakingly beautiful and accurate map making he was assigned to map the Big Horn Mountains in Wyoming. His knack of depicting in the shape of the contour lines the characteristics of the geological formations, together with the sculptured relief left by glacial action, caused Director Walcott of the Geological Survey to assign to him the mapping of Glacier National Park, 1900-1901; the Grand Canyon of Colorado River, 1902-1904; the Yosemite Valley, 1905-1908; and Mount Rainier National Park, 1910-1911. He next was assigned to make geological studies of the Yosemite and Sequoia National Parks; also of areas in Nevada, California, and the Central Mississippi Valley, 1913-1919. In 1906, following the San Francisco earthquake, he made field studies for the State Earthquake Investigation Commission of California. In 1936 he discovered that a primeval race had lived in the Sequoia giant stone basin.

Francois is survived by his wife, Edith Lovell Coyle Matthes. They had no children, but Francois was fond of boys and early became a scout master and later was active on the scout council. On two occasions he was selected to lead a group of Eagle Scouts on a complimentary tour of the West. For his work with the Boy Scouts he was awarded the Silver Beaver in 1931. For his work on the glacial history of Yosemite Valley he was awarded the Chevalier Order of King Leopold II (Belgium) in 1920. In 1947 the University of California conferred on him the honorary LL.D. degree. During both World Wars he served the Army and the Air Forces in connection with geological, water supply, and meteorological problems, which required him to postpone his retirement for three years after passing the age of 70. Francois was a prolific writer, and only his outstanding works can be mentioned here: "Glacial Sculpture of the Big Horn Mountains, Wyo.," published in 1900; "Mount Rainier and its Glaciers," published in 1914; "Geologic History of Mount Whitney," 1937; and "Geologic History of the Yosemite Valley," 1930. The last named book and his topographic quadrangles of the Grand Canyon of the Colorado River stand as monuments to his remarkable gift of striving for perfection in the execution of

his labors. Francois became a member of the Belgium League of Honor in 1919; he was a member of the American Association for the Advancement of Science and of the Washington Academy of Sciences. The latter he served as vice-president in 1933. He was a member of the Association of American Geographers, and of the Geological Society of Washington, and was president of both organizations in 1933 and 1932 respectively; he was a life member of the American Society of Civil Engineers; member of the American Geophysical Union since 1931; member of the British Glaciological Society, and of the International Commission of Snow, which latter he served as secretary for many years and up to the time of his death. He belonged to the American Alpine Club, the Sierra Club, the Appalachian Mountain Club, the French Alpine Club and was an honorary member of the Mazamas. The years have finally brought to the Class of 1895 the loss of one of its illustrious and beloved twins.

Sid Clapp writes from Kingston, N.Y., that he and Mrs. Clapp have not been in the best of health during their winter stay in Miami, Fla., but since their return to New York State their health is better.

James H. Wright, IV, passed away on March 20. Wright was with our Class for three years. After leaving Technology he was draughtsman with Walter J. Paine of Boston, and subsequently with Winslow and Wetherell. In 1898 he went to Paris and entered the atelier of Victor Laloux, where he studied for two years, traveling at times in France, England, Germany, and Italy. In 1900 he returned to America to the firm of Shepley, Rutan and Coolidge, until going into business for himself. His office was at 88 Tremont Street, Boston, until the time of his death. We learned recently, through the Alumni Association, of the death of DeNise Burkhalter on December 13, 1946, and of John Boedecker, Captain, United States Coast Guard, on January 12, 1946. Burkhalter had been in poor health for years from the effects of World War I. Johnny Boedecker was fond of the sea, and joined the United States Coast Guard in 1898 and finally rose to the rank of captain. He was not a letter writer and, consequently, we knew little of his doings. We recently learned of the passing of Francis Cushing Green, XI, at his home 504 Whittier Street, N.W., Washington, D.C., on August 17. In 1897 Green went to Nicaragua, Central America, as assistant engineer with the Nicaragua Canal Commission; in 1898 he became general superintendent, and later general manager of Consolidated Car Company where he served for about 10 years. Finally, he was associated with the Philadelphia City Planning Commission. During his many business connections he always was interested in improving the conditions of many laboring men. Leaving Philadelphia, he returned to Washington where he was born.

It is indicative of passing years when only two lads of '95 attended the 1948 Alumni Dinner. However, Alden and Yoder had a good time looking over a few oldsters, and appraising the inspiration of the younger set. Dickerman, still living in Charlottesville, Va., is fully occupied with



his family and his estate. Last winter he and Mrs. Dickerman took a trip to Florida and the report of his experiences was received by your Secretary in late January. The report is an epic. Nothing is missed, including gas and oil consumption, miles covered, costs, places visited and recorded temperatures—typical of Technology training for facts. Any tourist should be interested to have a copy for general use and guidance. One thing sure, his letters are an inspiration but, unfortunately, cannot be passed around for general consumption. Your Secretary regrets the delay in reporting this event. Some of us are familiar with the humanitarian interests of Alfred P. Sloan, Jr., yet it is gratifying to tell the Class that Sloan and Charles F. Kettering, of General Motors, have erected a tremendous new research laboratory and clinic in New York to lend their weight to the task of fighting the disease of cancer.—LUTHER K. YODER, *Secretary*, 69 Pleasant Street, Ayer, Mass.

## • 1896 •

It is with deep regret that your Assistant Secretary reports the death on September 24 of Charlie Locke, whose condition after a second operation this summer became progressively worse, in spite of the care which he received in the Infirmary. Funeral services were held on September 27, at 1:00 P.M. at the Leyden Congregational Church, 1835 Beacon Street, Brookline. The following members of our Class acted as honorary pallbearers: H. S. Baldwin, F. W. Damon, R. A. Davis, J. M. Driscoll, Miss H. L. Gates, H. G. Grush, H. R. Hedge, G. S. Hewins, P. B. Howard, E. C. Jacobs, H. C. Lythgoe, E. S. Mansfield, J. E. Owens, M. E. Pierce, E. H. Robinson, J. A. Rockwell, F. T. Rundlet, and C. W. Tucker. Your Assistant Secretary also represented the Class at the interment at Rye, N.H. Charlie's death occurred after these notes were submitted for publication; further details will be given next month.

The Class was well represented on Alumni Day, June 12, by Fred Damon, Bob and Mrs. Davis, Helen Chamberlain Dodd, Jim Driscoll, Hattie Gates, Henry Grush, P. B. Howard, Paul Litchfield, Charlie Locke, John Rockwell, Sam Smetters, Charlie and Mrs. Tucker, and Con Young, who were present at either the noonday open-air luncheon or the evening banquet, or both. The July issue of *The Review* carried an item of interest to the Class, which occurred on Alumni Day, as follows: "At 11:00 A.M., a new athletic cage, recently erected on the athletic field adjacent to the Briggs Field House, and west of Massachusetts Avenue was dedicated. The new cage, which will serve as an indoor athletic field for M.I.T. students, was named the Rockwell Cage in honor of Dr. John A. Rockwell, '96, who has been closely associated with athletic activities at the Institute for 50 years. The dedication address was made by President Compton, with response by Dr. Rockwell."

The Secretary received a card from Bakenhus in Havana dated June 30, saying that for his vacation trip he was going on from there to Cristobal, Puerto Barrios

and Guatemala, all new to him except Panama.—Fred Damon attended the American Leather Chemists' convention at Bretton Woods June 16 to June 20. While there Fred won the senior's silver cup for low net with a 76. This contest was for members over 50 with deductions based on one point for each year over 50. Fred and John Rockwell, among others, enjoyed some fishing on Lake Ontario, at Henderson Harbor, which is the beginning of the Thousand Islands. On the return trip, while trying to make a connection in Albany for another member of the fishing party Fred was picked up for speeding, and his polite acceptance of all questions with "Yes Sir," was quite outstanding in our memory. However, he had no other count against him and got off for ten dollars and the loss of time.

Jim Driscoll reports that he attended the commodore's dinner of the Plymouth Yacht Club on September 6, and found Henry Hedge there also. Walter James has sold his home in Waltham and moved to Topsfield about September 1, where his address is Boxford Road, Topsfield, Mass. Walter and Mrs. James found their house in Waltham too big for their small family, so bought a small house a short distance from their daughter's home and expect to enjoy it and find it more convenient in many ways. Jacobs writes that they had a comfortable summer, though very dry, and he has had to spade his lawn up and is now busy trying to get a new crop of grass started, which means daily watering. He has been so busy writing a bulletin on the geology of the region that his boat has laid at anchor for weeks at a time.

Norman Rutherford was married July 14, in Australia, to Mary Stewart Thomson. Norman reports that she is a very charming Scottish widow over twenty years his junior, and he is taking on a new lease of life. His health has improved very much since he returned to Australia and he is looking forward to at least ten years of quiet and happiness. Thomas McGlynn is now retired and lives on Atlantic Boulevard, Fall River. His post office address is Box 2331, Fall River, Mass. The house is delightfully located and an ideal place for a philosopher to live. Henry Sherman is now living at 20 Manthorne Road, West Roxbury 32, Mass. Lloyd Wayne wrote on August 26 that he was just about to leave on a trip of five weeks to Seattle, Los Angeles, and New Orleans, going first to Chicago to stop off with friends a day or two, then to Milwaukee, where he has two nephews. He expects to spend five days at the Telephone Pioneers' Assembly at San Francisco and then divide some five days with two nieces in Los Angeles and Taft Junior College, finally ending up with some cousins in New Orleans and St. Louis respectively. He expects to be back in Indianapolis by October 7. Lloyd also reported that Billy Andrew now lives at 2499 Acacia Drive, Concord, Calif.

Con Young has been having a good summer on the Cape. He and Abby plan to leave October 18 or October 20 for their winter stay in Florida, where their address will be care of Herman V. vonHolst, Floresta, Boca Raton, Fla., from November 1, 1948, to May 1, 1949.

We regret to report the loss of two

members of our Class. James G. Melliush passed away in Albany on August 26. For the past ten years Jim had been a sufferer from various chest complications and his courage and cheerfulness during these years might well be a model for those who have to accept the inevitable. As usual, the Class sent flowers, and a note from his daughter commented on the beauty of the flowers and expressed great satisfaction that her father's memory was honored by the Class. After graduation Jim served as sanitary engineer on various jobs in Illinois and Massachusetts, and was chief engineer on the sewerage system and municipal improvements in Barranquilla, Colombia, S.A., in 1931-1932. During World War I he served as captain, United States Public Health Service, division of industrial hygiene and medicine, January, 1919, to July, 1919, and was project engineer, United States Housing Corporation, September, 1918, to December, 1918. During World War II he was acting district sanitary engineer for the Poughkeepsie region. At the time of his death he was a sanitary engineer for the division of environmental sanitation of the State Health Department. He is survived by his wife and daughter. Funeral services were held Monday, August 30, at Tebbutt Memorial Chapel and burial was in Grace-land Cemetery. He was one of the loyal members of our Class and he will be long remembered. We certainly shall miss him and his piano accomplishments.

Nathan H. Sanderson passed away on April 28. He was a native of Waltham, where he received his early education, and a civil engineer of prominence. He was associated during the war years with the West End Iron Works of Cambridge, coming out of retirement to re-enter business. He is survived by a son, Nathan H., Jr., '38, and two daughters, Mrs. Maurice B. White and Mrs. Kenneth C. Raymond. Interment took place in the family lot in Grove Hill Cemetery, Waltham.—JOHN A. ROCKWELL, *Assistant Secretary*, 24 Garden Street, Cambridge 38, Mass.

## • 1897 •

Word has been received, without further details, of the death in Des Moines, Iowa on October 22, 1947, of Ralph E. Sawyer, IV.—Frederick D. Lambert, VII, died at his home in Tyngsboro, Mass., on April 20. After leaving the Institute he continued his medical education at Boston University and at Harvard University, receiving an M.D. degree from the former in 1900 and from the latter in 1901. He was a member of the American Medical Association and the Massachusetts Medical Society. He leaves his widow, four sons, two brothers and several grandchildren.

Word has just been received, without further particulars, of the death in Fort Lauderdale, Fla., late in June, of Stanley A. Hooker, II. This news will come as a shock to those who were at the 50th anniversary outing at Osterville in June, 1947. Stanley, who was accompanied by Mrs. Hooker, was one of the liveliest of the party, and many of us envied him for his abundant energy and appearance of good health. He always attended the major

out-of-town gatherings of the Class and was a loyal supporter of all class activities. His presence will be greatly missed at our future outings. For many years after graduation he was manager of the Reliance Textile and Dye Works Company of Covington, Ky. His residence was in Cincinnati, Ohio. Some 10 years ago he moved to Fort Lauderdale, Fla., which became his permanent home. He leaves a widow, one son and one daughter. The sympathy of the Class is extended to Mrs. Hooker and the family.

Jere R. Daniell has very kindly sent to us the following letter recently received from William R. Wood, XIII: "Your very interesting letter with enclosures has been read several times. Your impressions of parts of Europe were illuminating. All the news we get in the papers and magazines is so slanted that one has to read it with the question in mind as to what axe the author is trying to grind. Pontius Pilate's remark at a certain trial some 19 centuries ago 'what is truth?' is being asked today about many events. California had early rains in October and then almost none until the last few days. As a result, the water and power shortage is acute. The hydroelectric plants are shy of water and the steam plants are running to full capacity and are unable to supply all the power that is wanted. The whole situation has been complicated by the tremendous influx of people that have come into the state since 1940 and the inability of the power companies to get equipment because of war demands. The present rains, and snow in the Sierras, may save the power situation if it keeps up long enough, but the rain has come too late to save the hay crops. Well, enough of our troubles here on the coast. I remember Curtis, Smith, Hunnewell, Binley, Hubbard and Stebbins very well, although except for the last named, I have not seen them since '97. I kept in touch with Stebbins for a number of years but do not know his present address. I think it is somewhere in New Jersey. Those old prints of the group on the tug and in the drafting room were very interesting. I could identify Curtis and Stebbins, but not the others. Time certainly flies along only too fast. Tempus fugit, or tempus fidgit, as we used to say.

"You ask about the name of Danville. Some of the places around us accuse us of being 'fuddy-duddies' with more or less reason. We were a nice agricultural community until the boom in population and the real estate brokers moved in. We, the 'fuddy-duddies,' think the place is in a fair way to go to the dogs. The brokers are happy. Daniel Boone is reported to have moved because he had acquired a neighbor within 100 miles. We feel somewhat the same way. Orchards and hay and grain fields that were beautiful when we came here are being cut up into small lots with all the attendant problems of city living. And believe me there are many problems including water, sewage, schools, health, and fire and police protection. We never used to think of locking up things; now we have to do so. Guess we will have to do what Daniel did — move on. The G.I.'s and others have paid what seem to be crazy prices for the

homes. How they can pay for them is beyond me. They may figure that old Uncle Sam will give them the money when the pinch comes — and come it will. I could write a volume on California and local problems, but when I listen to the news on the radio, read the papers and see what our friends in Washington are doing, I am not happy. It is still raining, and I hope snowing in the Sierras, so we may feel more cheerful bye and bye." — JOHN A. COLLINS, JR., *Secretary*, 20 Quincy Street, Lawrence, Mass.

## • 1898 •

When Lester suggested in June, 1946, the plan for the 50th reunion, we wondered if it would work. Now, we wonder why we ever had any doubt. George Reed Wadsworth, first marshal on that historic Class Day in June, 1898, remarked, "Today we live on the clouds, come what will tomorrow." For four epochal days at the Golden Anniversary, '98 lived on the clouds. It's all over, did we hear someone say? Over? Why, it has only just begun! How come, just begun? Well, listen and judge for yourself.

First, Lester is conferring another inestimable benefit on the Class by writing up the reunion. This will be printed in pamphlet form and distributed to all the members of the Class, whether they attended the Golden Anniversary or not. You may have already received your copy, so that you know what we mean when we say that this is a continuation into the future years of the grand uplift of the Golden. Then, there was an election of officers at the Country Club on June 10, 1948, and our organization was expanded a bit in the interest of more perfect functioning. Those present will remember that a president was elected, Van Lansingh, and two vice-presidents, Dan Edgerly to represent the central region of the country and Howard Bodwell to represent the west. Van, with characteristic energy and initiative, has suggested plans to extend the fellowship of the Golden. Dan has made some interesting statistical studies, and Howard has written helpful suggestions. You will all hear presently what is proposed.

Thirdly and lastly, this is where you all come in. Did you enjoy meeting classmates whom you had not seen for 50 years, and their wives and children; and did you solemnly swear that such an interval of separation must not intervene again, but that we must continue regularly the new fellowship and visit one another between as well as at reunions? Well, team up with your officers when you hear from them and work for a new unity of class interest and fellowship. Write in suggestions that came to you during or have come to you since the Golden.

The description of the reunion in Lester's picturesque and graphic style, which you have doubtlessly already received, precludes the necessity of special description in the Class Notes. However, for the sake of a permanent record available to all that may be interested, the program will be included in these notes together with a few significant figures.

Golden Anniversary of the Class of '98,

June 9 to June 12, 1948. Wednesday, June 9: 9:00 A.M.: Left Parker House by bus and cars for Wellesley Hills; 10:00 A.M.: Welcome Address, "Looking ahead Fifty Years," Roger W. Babson; 10:30 A.M.: "General Economic Outlook for 1948," Dr. Edward B. Hinckley, President, Babson Institute of Business Administration; 11:00 A.M.: "Outlook for Commodities," Herbert Downward, Commodity Editor, Business Statistics Organization; 11:30 A.M.: "The Financial and Investment Barometer," E. Lafayette Quirin '24, Director of Research, Babson Reports, Inc.; 12:00 Noon: Question Period, Appreciation by Lester Gardner; 12:30 P.M.: Description and Inspection of the Great Map, Miss Teresa Gubellini, Custodian, The Babson Relief Map; visit to the Newton Room and Library; between addresses, songs by Babson Institute Glee Club; 1:00 P.M.: Lunch, Guests of Roger Babson; 2:00 P.M.: Class Picture and Symposium, "The Parade of Stars;" Five minute talks by "Men of Distinction," George Cottle, Chairman: "Automobile Outlook," W. R. Strickland; "Investing for Others," George W. Treat; "Lake Shipping," Robert B. Wallace; "World Aeronautics," Lester D. Gardner; "Rare Metals," Van R. Lansingh; "The Military," Robert S. Allyn; "To Dye or not to Dye," Edward S. Chapin; "To Die or not to Die," Charles E. A. Winslow; "The Model '98 Housewife," Mabel Forrest Lambert; "The New Chemistry," Arthur A. Blanchard; "Fire Prevention," Clarence Goldsmith; "Navy Ship Design," A. Loring Swasey; "The Atomic Age," M. DeKay Thompson; "Medical Science," Harold W. Jones; "More and Better Babies," Alice W. Tallant; "Paint — For Men Only," Daniel W. Edgerly; "Modern Architecture," Rudolph Tietig; "Exports and Imports," Fred H. Twombly; "Retail Merchandising," Charles F. Wing. 4:00 P.M.: Return to Parker House by busses; 7:00 P.M.: '98's Golden Class Dinner, Charles E. A. Winslow, Toastmaster; In Memoriam, Rev. Donald H. Alexander; Burlesque on undergraduate Class Dinner speeches: "Cadet Training at M.I.T.," Robert Starr Allyn; "Tech as she should be," Lester D. Gardner; "What I didn't learn at Tech," Roger W. Babson; "Roaming round the world," George T. Cottle; "Class Dinners," William R. Strickland; "Your Humble Servant," Edward S. Chapin; "How to be a Professor," M. DeKay Thompson; "Tech Theatricals," Ernest F. Russ; "Till we meet again," George W. Treat. Thursday, June 10, 10:30 A.M.: Left hotel by bus for The Country Club, Brookline. The Class were guests of George T. Cottle and George W. Treat; golf, croquet or what you will; 1:00 P.M.: Luncheon in honor of President and Mrs. Compton; 2:30 P.M.: More of morning exercises; 4:00 P.M.: Class Meeting, Election of Officers; 5:00 P.M.: Left by bus or car for hotel. Evening open for individual dinners and visiting with friends. Friday, June 11, 10:00 A.M.: 1948 Commencement, Symphony Hall, Marshal, Charles E. Locke, Alumni Secretary; 1:20 P.M.: Presentation of gifts to Mrs. Compton flown from many foreign countries at M.I.T. boat house on Charles River. (Lester Gardner arrived with gifts in am-



phibian plane); 1:30 P.M.: Luncheon to the Class by President and Mrs. Compton, Campus Room, M.I.T. Graduate House; 4:00 P.M.: President Compton's reception and tea dance, Walker Memorial; 8:00 P.M.: Pops Concert, Symphony Hall. Saturday, June 12, Alumni Day, 10:00 A.M. to 12 NOON: Inspection and registration at M.I.T., Alumni, their wives and guests; 12:30 P.M.: Luncheon in DuPont Court at the Institute Buildings for Alumni and their wives; special table reserved for 50-year class; 2:30 P.M.: Symposium on Logistics of Peace by internationally-known speakers; 7:00 P.M.: Alumni Banquet at the Hotel Statler, Boston, Class of '98 guests of honor; an evening of gaiety and fun with a souvenir stein on the table. Speech by Dr. Compton, presentation of '98 fifty-year gift by Edward S. Chapin.

And now for the figures. As nearly as we are able to determine, 94 classmates attended the Golden Anniversary, at one or more events; and there were 64 others, wives, sisters, sons and daughters, sons and daughters-in-law, and friends. Indeed, the total of others comes to about 100, if we include in the list additional relatives and friends, who were with us at the Commencement exercises and at the Pops concert.

The count for attendance at certain of the events was as follows: Babson's, 125; Algonquin Club, 112; Country Club, 118; President Compton's luncheon, 115; Pops Concert, 121.

A feature of Saturday was the presentation to Dr. Compton at the Alumni Banquet of the '98 fifty-year gift. This gift has been widely publicized so that it is only necessary to state that as of June 12 it amounted to approximately \$70,000. During the summer there have been additional capital and annual gifts, and further promises of gifts, all of which will be fully reported in due course. — EDWARD S. CHAPIN, *Secretary*, 463 Commercial Street, Boston 13, Mass.

## • 1899 •

A meeting of the committee to outline plans for our 50th reunion next June was held at the Graduate House just prior to Class Day. Sherrill, Skinner, Witherill and your Secretary attended. Sherrill, Witherill and Rickards attended both the class luncheon and the alumni dinner. Skinner and Kinsman, and possibly some others, were absent because of the conflicting dates of the Associated Industries convention. Committees to handle details of the 50th reunion of the Class are in process of formation and a letter to classmates will be forthcoming.

Herbert C. Greer of Morgantown, W. Va., died of a heart attack on August 5, according to a clipping from the Pittsburgh *Post-Gazette*. He had been in ill health for about two years. Colonel Greer, a native of Sharon, Pa., entered the employ of the National Steel Company after graduating from Technology. Later he became general manager of the LaBelle Iron Works at Steubenville, Ohio. In 1922 he became president of the West Virginia Newspaper Publishing Company, which publishes both the Morgantown *Post* and

the *Dominion-News*. He is survived by his widow and a married daughter.

Details regarding the death of Harry M. Keys, VI, of Kingsport, Tenn., have been furnished by another classmate, Charles A. Smith, of Atlanta, Ga. After leaving the Institute, Keys was with the Bell Telephone Company of Philadelphia until 1904, with the Keystone Telephone Company from 1904 to 1906 and with the Home Telephone Company of Albany, N.Y., from 1906 to 1908. He then became an official of the Southern Bell Telephone Company at Atlanta, Ga. Keys retired December 1, 1936. He is survived by his widow and one daughter.

Edwin Sutermeister, V, of Westbrook, Maine, was the recipient of an honorary doctor of science degree from the University of Maine at the commencement exercises held in Orono on June 20. In 1935 he was awarded the medal of the Technical Association of the Pulp and Paper Industry "in recognition of his many contributions to the art and science of papermaking." Sutermeister is a member of the research staff of the S. D. Warren Company at Cumberland Mills, Maine. — BURT R. RICKARDS, *Secretary*, 381 State Street, Albany, N.Y.

## • 1900 •

On June 4, Stanley Fitch, Charlie Smith, Percy Ziegler and the Secretary (four of the committee of five selected at the class meeting at East Bay Lodge on June 21, 1945) met at a luncheon to appoint a committee of 15 to arrange for our Golden Anniversary in 1950. (See Class Notes in The Review of November, 1945.) The matter was discussed generally but no definite action was taken at that time.

Only seven members of the Class showed up at the alumni reunion on June 12. These were Fitch, Bob Leach, Newhall, Silverman, Charlie Smith, Percy Ziegler and the Secretary. Mrs. Smith graced the occasion by her presence. Pickersgill had registered but did not appear. We enjoyed a social gathering in the Institute's central hall in the morning and lunched together in the court. After the Symposium in Walker Memorial Bob Leach had to leave, but the others enjoyed Stanley Fitch's hospitality at his home in Cambridge. From there we adjourned to the Hotel Statler for the very interesting banquet.

George Gibbs writes: "I came to Chicago last October, at the request of the Bishop of Chicago. There are two of us, members of the Society of Saint John the Evangelist, in charge of this Parish (St. Francis' Church), and also work at some of the hospitals of the City Mission. I have been kindly invited by the M.I.T. Club of Chicago to two of their affairs. I had to decline both as they came when I was otherwise engaged. I had intended to be present at the reception for the President of M.I.T. and his wife. I went East the last of March, after Easter, but had to go to Cambridge and enter a hospital for twelve days. I got a little tired in Chicago with its severe climate last winter. My heart was strained and I had to take a rest and returned early in May to Chicago. I am quite recovered now, but have a

rather strict diet and am taking my duties a bit easier."

Also we have a letter from Greenleaf Pickard who writes under the letterhead of Pickard and Burns, Inc., consulting engineers, 66 Needham Street, Newton Highlands, Mass. He says: "After spending the war years in Attleboro, Mass., as director of research for the American Jewels Corporation — we made quartz crystals for the Army and Navy — I reconverted by taking two jobs simultaneously. One, as indicated by the letterhead, being the formation of a consultant firm, and the other with the M.I.T. Cosmic Terrestrial Research Laboratory at Needham, Mass. Since its formation, my firm has been principally concerned with studies of navigational aids for the Air Materiel Command (Watson Laboratories). Some idea of my cosmic terrestrial work may be gained by reading the enclosed recent papers, although this is not compulsory even for a Class Secretary. [I might read them but I am sure that I wouldn't understand them. E.G.A.] My wife, myself and our six children are continuing in good health and spirits. As to grandchildren, and merely for the record, not to establish one, the present count is nine." The Secretary takes pleasure in recording 10 grandchildren and wonders what the class record is. Let's have some bids! We wish that we might have many letters this year as interesting as the above two. Please do not wait for the Secretary to importune you — and do not put it off.

Garabed Heghinian, XI, I, is reported to have died on February 19. He had been with the New York Department of Highways at Babylon, Long Island, for many years. — George M. Holbrook, V, died on March 31. The *Cambridge Chronicle and Sun* said of him: "George M. Holbrook, formerly of this city, and graduate of M.I.T. in the class of 1900, died in Chicago of heart failure. He worked 41 years for Armour and Company and retired in 1944. He leaves a wife and one son, and a sister in Los Angeles." — A clipping from the Keene, N.H., *Sentinel* reads: "Edmund H. Pitcher, 72, of 18 Howard Street, husband of Nettie M. (Emery) Pitcher, died . . . [July 21] . . . at the Elliot Community Hospital after a long illness. Mr. Pitcher was born in Stoddard, a son of the late Charles P. and Sarah M. (Sargent) Pitcher. He had lived in this community all of his life. He graduated from . . . Technology . . . and following three years with the Pacific Mills in Lawrence, Mass., he purchased the Keene Screen & Awning company in 1908. He had conducted that business ever since. He had been a member of the Court Street Congregational church for over 50 years and was a member of the men's club of the church. Besides his wife he leaves two daughters, Helen, wife of William F. Christiana of Hudson, New York, and Ruth, wife of Reginald C. Swan of Keene, one sister, Mrs. Ethel M. Brockway of Keene and three grandchildren." — ELBERT G. ALLEN, *Secretary*, 54 Bonad Road, West Newton 65, Mass.

## • 1901 •

John Boyle writes: "Another classmate

here is William Arsem, V. He is also associated with the War Assets Administration as technical advisor on chemical plant disposal. We were closely associated in the chemical laboratory in the early days. He was the star pupil in chemistry. After having been widely separated for many years, it was a strange coincidence to find ourselves so closely associated again. Forty-five years ago I came to Washington and entered the government service as a patent office examiner. Half of the time since then I have been with the government and the other half as a practicing patent attorney. I re-entered the government service January 1, 1943, in the office of Alien Property Custodian where I was chairman of the review committee in the division of Patent Administration. This committee reviewed, over a period of three years, about a thousand patent applications of alien enemies, that were seized by the Custodian, to decide whether they had sufficient merit to warrant further handling. In January, 1946, I went with the Reconstruction Finance Corporation as patent counsel in connection with surplus property disposal. This activity was transferred later to the War Assets Administration and I am now patent counsel for that outfit. The investment of many billions of government money in industrial war plants, a large proportion of which are chemical and metallurgical has resulted in many complicated patent problems incident to disposal. During the War, I estimate the government employed at least 150 patent attorneys which will give you some idea of the magnitude of the government's interest in this activity. When the job is done here I will resume private practice which may be in the near future."

A note from Fred Sexton follows: "I retired May 6, 1947, and am now working for myself and doing mainly what I please. I have been busy completing a residence under present distressing material and labor conditions, making lawns, doing a little fruit farming, and continuing some activities in education with the United Nations Educational, Scientific and Cultural Organization and vocational training. I was so well treated on my retirement that I could not fail to think that my associates viewed it as an event that justified a celebration. The college faculty gave me a complete outfit of woodworking machines for a home workshop; the college alumni presented me with a new car; and two universities accorded me with an honorary degree. The most pleasant anticipation I have at present is a long trip to my camp on a salmon river in Newfoundland which I have not had a chance to visit the last seven years." Fred's address is 40 Westwood Avenue, Wolfville, Nova Scotia, Canada.

Langdon Pearce reports that he is still "sanitary engineer for the sanitary district of Chicago, concerned with sewage treatment for over 4,000,000 people plus industrial wastes equivalent to an additional 4,000,000. By-product of heat dried activated sludge sold wholesale in bulk. Employed by Sanitary District since March, 1909. So far as I know, the only '01 men in the Chicago area are DeBerard, Philip Moore and F. W. Puckey. For va-

ried problems, my position is unusual, covering legal problems, right of way and so forth, public relations, special reports, treatment works design and operation, use and sale of fertilizer material, and operation of more than nine miles of old gage railroad — approximately 6,500 carloads in and out yearly. I am still chairman of the committee of the sanitary engineering division on sewage and sewage treatment of the American Society of Civil Engineers with biennial report; in my spare time, I aid in the preparation of practice manuals for the Federation of Sewage Works Association. I no longer play golf, but still enjoy fishing, both in salt and fresh water — including tarpon and black bass."

Warren Bickford says: "I am still loafing and enjoying good health — Pittsburgh in the winter and Centerville, Cape Cod in the summer. I attended my 50th class reunion at Phillips Exeter Academy last May. Of the seven members of the class of 1897 who returned, three were members of our Class at Technology; namely, Joe Evans, D. Homer Hayden and myself, all now retired. Hayden is living at Sarasota, Fla., and Joe at Omaha, Neb. I saw Joe later at the Cape where he and his sister called on me and were my guests for lunch at the Beach Club in Centerville."

A letter from Philip Moore of September 7 says: "I have just returned from a month East in Maryland and a motor trip through New England. Deborah Elizabeth Gelfan arrived on July 23, the eighth granddaughter and the 12th grandchild in the series. Mrs. Moore and I spent a few days at the New Ocean House, Swampscott, and had many memories of pleasant reunions the Class has held there heretofore." Phil also informs us that: "At the annual meeting of Poor and Company in April I was elected to the Presidency." The Secretary would like to add that in the September 6 issue of *Time* magazine under the heading of Science, there is a very interesting and informative article written by Phil's son-in-law, Dr. Samuel Gelfan of Yale faculty — also his picture.

We have received the following notice, dated June 9, from the Lawrence, Mass., *Tribune*: "Chester N. Chubb, a native of Lawrence, president of the San Antonio Public Service corporation, was recently named president of the United Light and Railway Co. and the Continental Gas and Electric Corp. He has been connected with the two concerns for a period of thirty years.

"Mr. Chubb will continue to maintain his home in San Antonio, Texas, but his business interests will be in Chicago, Ill. He is a graduate of the Lawrence High School and . . . Technology. He has one son, Niles, who is a student at Texas Law school." We are pleased to be able to contradict the surmise, published in the July issue of *The Review*, that Philip A. Potter was deceased. We received on June 7 from the Register of Former Students, the information that he is living at 156 Sheridan Avenue, Hohokus, N.J. — I report with regret the death of LeRoy M. Backus in Seattle, Wash., on June 18. In recent years he was in the business of real-estate

management and trustee of estates.

Referring to the letter of August 19 which we all received from Al Higgins, Class Agent of the Alumni Fund, your Secretary was right in the midst of the "Cane Rush" of 1897; or rather, it would be more accurate to say that I was on the midst of it, as being small, I was thrown onto the steaming mob and there I remained with one arm around a big guy's neck and the other hand on the "Cane" until I was counted. I am glad that Al suggested that you write to me about your activities. I have been told by many classmates that the first thing they do when they receive *The Review* is to turn to the Class Notes. Let me know what you have been doing. As Al says, "We're all still interested in each other." — GUY C. PETERSON, Secretary, 788 Riverside Drive, New York 32, N.Y. THEODORE H. TAFT, Assistant Secretary, Room 3-282, M.I.T., Cambridge 39, Mass.

## • 1902 •

Thanks to Hunter your Secretary is able to report the attendance at the Alumni Day luncheon and banquet. Patch, Moore, Mahar, and Hunter attended the morning exercises and luncheon, and all but Moore were on hand in the evening. Walton Sears announced his retirement from his position with the mechanical engineering construction division of the Metropolitan District Commission on July 1. He will enter into engineering practice as consulting engineer, specializing in mechanical engineering as applied to water and sewage treatment projects. His address is now 160 Pleasant Street, Arlington, Mass. George E. Mather has left Greenfield, Mass., and now resides at 704 Poinciana Street, Ocala, Fla.

Through newspaper clippings, news has been received of the death of Charles J. Bonnemort and Charles C. Stover, who had been ill for a long time. The following is taken from the *Dedham Transcript*: Charles J. Bonnemort . . . a graduate of . . . Technology . . . was a civil engineer and held a responsible position in the land and tax department of the New York Central Railroad. . . . Mr. Bonnemort was a native of Dedham and 69 years of age. He leaves his wife, Edith, and three daughters, Mrs. Esther Vanderpool of Waldoboro, Me., Mrs. Shirley Schmalz of Cincinnati, and Mrs. Phyllis Grant of Clinton, N.Y., also a son, Charles R. of Cranston, R.I., and a sister, Miss Inez Bonnemort of Dedham. Bonnemort had been in railroading since graduation, entering the employ of the Boston & Albany as rodman and remaining with N. Y. Central System until his death."

A clipping from the *New York Times* of July 29 gives the following information regarding Stover's death: "Providence, R.I., July 28 — Charles Clark Stover, president emeritus of the What Cheer Mutual Fire Insurance Company since 1945 and president and treasurer for twenty-three years previously, died at his home here last night at the age of 70, after a long illness. Mr. Stover was a former director of the Blackstone Mutual Fire Insurance Company, the Factory Service Corporation, and the Providence Building Company, and a former member of the



Butler Hospital Corporation. Born at Amesbury, Mass., a son of Charles M. and Ellen Clark Stover, he was graduated from . . . Technology with a degree in mechanical engineering. . . . He entered the insurance field in 1903. Surviving are his widow, Mrs. Elna S. Stover, and two sons, Charles C. Stover, Jr., of Colonia, N.J., and Roger M. Stover of Providence."

Last February a letter was sent out by your Secretary to over 100 of the class members giving information regarding the 1952 class reunion. Thirty-five dollars sent to our Treasurer, J. Albert Robinson, before January 1, 1949, insures your full hotel expenses for the event; or \$50.00 paid in \$10.00 installments starting in 1948 accomplishes the same thing. To date 15 members have paid the \$35.00, and three have started on the alternate plan. Now is the time to make sure of your attendance. Send a check to Robbie. — BURTON G. PHILBRICK, *Secretary*, 246 Stuart Street, Boston 16, Mass.

### • 1903 •

Our 45th reunion has come and gone and we are on the way to our 50th. Eighteen members of the Class with 11 wives and five daughters gathered at the home of Fred and Mrs. Eustis in Milton on June 11, to enjoy a good time dining together, singing and renewing acquaintanceships. We appreciate the generosity and hospitality of our charming host and hostess. (This is written by Cushman and I am sure reflects the feeling of all who were there.)

Those present were: A. B. Allen, M. H. Clark, A. H. Eustis, H. H. Fales, G. H. Gleason, L. B. Gould, C. F. Green, R. H. Howes, C. M. Joyce, R. J. King, Harold Osborn, H. F. Peaslee, J. W. Regan, W. P. Regestein, T. E. Sears, Mrs. A. A. Shurcliff (Margaret Homer Shurcliff), and the Secretaries. Also present were: Mesdames Cushman, A. H. Eustis, F. A. Eustis, Fales, Gleason, Gould, Joyce, King, Osborn, Regan, and Sears; together with the following daughters: Elizabeth Eustis, Margaret Eustis, Jane Sears, Victoria Sears, and Mrs. Frederick Regis, Jr.

The next day many of this same group lunched together at the Institute, and five of us attended the Alumni Banquet at the Hotel Statler in the evening. We received a great many letters of regret, from which the Secretaries have collected notes of interest to be forthcoming in Class Notes. Keep our 50th in mind; more about this will come to you later.

Alexander J. Scholtes, IV, died in Milton, Mass., on July 18. After graduating with us he taught at the Lathrop School in Groton, Mass., and in 1920 was associate professor of Architecture at the Institute. For 40 years he was a consulting architect of Olmsted Brothers, landscape architects of Boston. He was a member of the Boston Society of Architects, Massachusetts State Society of Architects, and the American Institute of Architects. He leaves his wife, two daughters and a son. H. S. Morse reports the birth of his fourth grandchild. Each of his two children has two children. Myron Clark was busy all summer long preparing for and directing his labor-management clinic, offered by

the Labor-Management Institute of the University of Connecticut. An ambitious and interesting five-day program of discussion of labor and management relationship is offered with the hope that by these discussions, labor and management may "come to a better understanding of the fundamental principles of sound industrial relations." Clark was awarded a life membership in the Society for the Advancement of Management in recognition of his loyal membership and support. — FREDERIC A. EUSTIS, *Secretary*, 131 State Street, Boston 9, Mass. JAMES A. CUSHMAN, *Assistant Secretary*, Box 103, South Wellfleet, Mass.

### • 1907 •

On June 12, Alumni Day, the following men of our Class were present during the entire day and evening: Clinton Barker, George Crane, Clarence Howe, Ralph Hudson, Ed Moreland, Bryant Nichols, Gilbert Small, and Phil Walker. These men, together with Tom Gould, also attended what was probably the most delightful part of the day for '07 men; namely, an informal get-together with Clarence Howe, who, as most of you know, is Minister of Trade and Commerce for the Dominion of Canada, between 5:15 P.M. and 6:45 P.M. in a private room for which we had previously made arrangements at the Hotel Statler. Many years had gone by since some of us had personally seen Clarence, and we had a very pleasant time talking over events of undergraduate days as well as some of the events and problems associated with the administration of Canada. Clarence was one of the speakers at the afternoon symposium and, hence, was honored with a seat at the head table during the banquet in the evening; but with his customary friendliness, he left his place on the platform during part of the evening and joined the rest of us at our table on the floor.

Prior to last August I would have thought that it would be extremely improbable that I would ever again be announcing the marriage, at least for the first time, of any of our classmates, but early in that month I received an announcement stating that on August 2, Frank MacGregor was married to Mrs. Elizabeth Marshall at Wilmington, Dela. Frank has written me that he has known his wife since 1908, as she was one of his sister's classmates at Mount Holyoke College, class of 1910. She received a master's degree at Columbia College in 1912 and lived abroad for a number of years. She has recently lived in New York City and Washington, D.C. Frank, as you know, retired a few years ago from active business, and we all are delighted that during the latter part of his life he will have a companion to share his fine home at 2307 Ridgway Road, Wilmington. — On August 21 Dorothy Winsor Coffin, one of Bill Coffin's daughters, was married to Charles John Harvi of Cambridge, Mass. This is the second marriage in Bill's family during the past year, as his daughter, Barbara, was married in June to Howard E. Norris.

The death of Charles W. Coffin occurred on January 14. You may remember

that during undergraduate days Charlie was popular in class affairs, and he made quite a reputation for himself in taking female parts in the Tech Shows. Charlie took the Course in Civil Engineering and between 1907 and 1919 was connected with the Board of Water Supply of New York. Since that time I had never received from him any reply to letters, but I did know that he was associated with the Guaranty Trust Company at 140 Broadway, New York City. After learning of his death through the alumni office, I wrote to the bank and received a reply which reads in part as follows: "Mr. Coffin entered our employ on June 2, 1919, and at the time of his death was in charge of the financial statement analysis division of our credit department. We considered him tops in this line. He was quite ill for approximately two years before his death and according to our records was unmarried and lived at 67 Hanson Place, Brooklyn, New York. Our records do not contain any further family history."

During the early part of July Mrs. Nichols and I were in the vicinity of New York City visiting one of our daughters and her husband, and while there I called at the offices of some of our classmates who are located in downtown Manhattan. I had a very pleasant little visit with Otis Fales, who is vice-president and secretary of the Gregg Company, Ltd., at 19 Rector Street, New York, manufacturers of railroad cars and track material. A large amount of their business is done in Belgium. I had not seen Otis since 1907. Aside from natural maturity caused by the passing of time and the problems of living, he looks much the same as he did during undergraduate days when he used to play the banjo in the Musical Clubs. I also called on Hugh Pastoriza, who is associated with Coffin and Burr, Inc., at 70 Pine Street, New York. Hugh was at our reunion at Oyster Harbors in 1947, so my meeting with him did not have to cover so long a span of years as my visit with Otis Fales. Hugh has four sons and one daughter and apparently is happily situated both in business and in his family life. I also called at the offices of Bob Thayer and of Anthony Arnold, but neither of these men were in at the time of my calls. I did learn, however, from Arnold's secretary that his wife died in September, 1947. He has no children but still lives at the fine family home in Westfield, N.J. I also tried to see Harold Farrington, whose address I had supposed to be 43 Cedar Street, but I learned that he was not in that building, and no one seemed to know his new address. Subsequently, I wrote to Harold and received a reply from him dated July 19 on a letterhead indicating that he is now located at Suite 2101, 370 Lexington Avenue, New York City. He wrote that formerly he did have a personal office at 43 Cedar Street and also an office at 20 Pine Street, where Commonwealth Gas Corporation, of which he is president, had its headquarters; and in addition, at 350 Madison Avenue, where the Standard Stoker Company, of which he is chairman of the board, had its headquarters. At the end of 1947 these various companies arranged to lease the entire 21st floor at 370 Lexington Avenue for a period of 10 years.

Harold's home is in Danbury, Conn., on Route 6 at the New York-Connecticut state line.

Ed Moreland continues to receive well-deserved honors. On June 29 he was one of a group of eminent scientists to receive the Medal of Merit, the nation's highest civilian award, given for his contribution to the World War II effort, and the Boston *Herald* of July 28 recorded the fact that Ed had accepted membership on the Massachusetts School Building Commission, recently established by the state legislature. — An announcement received by Phil Walker at Whitin Machine Works from the Morrow Sales Company, whose general offices are in Winston-Salem, N.C., stated that effective August 1, Emerson H. Packard had become their direct sales representative in the New England states, with his office at 618 Little Building, Boston, Mass. Emerson will sell coal conveying equipment.

The Chicago *Tribune* of April 25 contains a story about Andrew N. Rebori, who is associated as consulting architect with DeLeuw, Cather and Company, 150 North Wacker Drive, Chicago. Some of you may know that Andrew's father died when he was about three years old. He, his mother, brother, and sister had a considerable struggle to live on the East Side of New York City. He began making blueprints in an architect's office when he was 15, and at 18, after he had finished studies in an evening high school, he entered the Institute. He eventually won two scholarships, one of which took him to Europe. He went to Chicago in 1911 as a professor of architecture at the Armour Institute of Technology and since that time, has become a very well-known and successful architect. His work has included the design of Loyola University Library, Loyola Della Strada Chapel, Streets of Paris at the Century of Progress Exposition in Chicago, and numerous theaters, apartments, clubs, post offices, and college buildings. He married a girl whom he met while at Technology and has a married daughter. His son, Andrew P. Rebori '39, is a building contractor in Chicago.

The Cincinnati *Times-Star* of April 14 stated that Harold W. Streeter, who was associated with our Class in the Course in Sanitary Engineering and who for many years has been officer in charge of the water and sanitation investigation station of the United States Public Health Service in Cincinnati, was retiring after 34 years in the public health service. The article read in part: "He has written for engineering magazines, and his associates credit him with responsibility for many of the fundamental concepts concerning stream pollution which are accepted universally today. His theories on water purification are taught to all sanitary engineering students." Streeter's address is Old Indian Hill Road, Indian Hill, Ohio. — According to a clipping from the July 18 Montana *Standard* of Butte, Mont., Carl Trauerman, Secretary of the Mining Association of Montana, was to address the annual convention of the National Association of Securities Administrators in Portland, Oregon, on July 21, on the subject, "Sale of Primary Mining Securities."

I received by air mail from Manila, Philippine Islands, a thoughtful letter, dated August 9, from Willis G. Waldo, Vice-president of Florida Ramie Products, Inc., as follows: "Anyone who enjoys living quietly at home, as I do, certainly ought not go into the business of processing ramie fiber. It keeps one away from home most of the time. Our successful work in Florida brought inquiries from many ramie-growing countries (18 of them) all the way around the world, and most of them too close to the equator for comfort! The Republic of the Philippines has had a technical delegation in the United States which inspected our plant and invited us to make a ramie survey of the Philippine Islands. Our work is for the National Development Company, a Philippine Government corporation which will probably build a demonstration ramie-processing plant here to show how ramie can be processed to recover the fiber in degummed form along with several of the by-products. We are planning to visit the more important islands here during the next month or so and return home by way of Alaska, stopping in China and Japan on the way. It seems odd that this is the short way between New York and the Orient rather than via San Francisco and Honolulu. Manila is a badly damaged town. Although a great deal has been done toward rebuilding the city since the terrific bombardment that was necessary to get the Japanese out, it is still a city of skeleton buildings and makeshift shacks."

The Boston *Post* of July 11 contained an article entitled "Magic in New England Laboratories," and included a story about the work of William S. Wilson who is research chemist, specializing in studies on paper, with the Monsanto Chemical Company. He has been associated with this company or its predecessor ever since 1907 and for the past 20 years has been director of research. The article states that our classmate is devoting much of his time now to the problem of wet strength of paper. He believes that the country will soon be using such products as paper tents, bottles, rain coats, and tarpaulins. Wilson's home address is 18 Bellingham Road, Chestnut Hill, Mass. — BRYANT NICHOLS, *Secretary*, 23 Leland Road, Whitinsville, Mass. HAROLD S. WILSON, *Assistant Secretary*, Commonwealth Shoe and Leather Company, Whitman, Mass.

## • 1908 •

Our 40th reunion was held at the Oyster Harbors Club, Osterville, Mass., from June 9 to June 11. Having held our 25th, 30th and 35th at Oyster Harbors, we felt very much at home. George Whittle, from San Francisco, who was attending his first reunion, was the first arrival, followed soon by George Belcher and Nick Carter all in time for lunch. Soon after lunch several golf matches were under way, but not for long, as old "Jupiter Pluvius" took over and the golfers called it a day.

By late afternoon the following had arrived: Jefts Beede, George Belcher, Bill Booth, Jim Burch, Henry Blackburn, Claude Brown, Ralph Batchelder, Nick Carter, Myron Davis, Ray Drake, Leslie Ellis, George Freethy, Harold Gurney,

Sam Hatch, Ernest Kilburn, Karl Kennison, George Lees, Harry Lord, Howard Luther, Steve Lyons, Linc Mayo, Joe Pope, Henry Sewell, Miles Sampson, Frank Towle, Abbott Thompson, and George Whittle.

The inclement weather was a blessing in a way, as it kept the fellows inside where they could get re-acquainted and talk over old times. As they arrived they got a name badge for their coats and a white gob cap marked in red, OT8. This helped a great deal in keeping our group together. The ice cream manufacturers were finishing a convention at the Club and it was helpful to be able to spot all '08 men. The OT8 on our caps caused some questions as several asked what "oats" stood for.

After an excellent dinner we moved out into the lounges and talked. Bill Booth had brought a copy of the book which Cookie made after our 15th reunion. The photographs of 25 years ago certainly showed how we have changed. About this time several bridge games got under way, with experts like Steve Lyons and Ray Drake leading off.

Thursday was cloudy, but free from rain. Our golfers were out again, and the short course golfers under direction of Karl Kennison did a job on the clock golf green in front of the Club. Karl not only directed but seemed to be top winner.

The weather didn't favor swimming or the fishing trip we had considered, but during the afternoon several of the group enjoyed visits around the Cape. Linc Mayo took Howard Luther and Jefts Beede to Woods Hole to see the famous Webster Rose Gardens. Our camera fans were always busy and based on results so far seen, we should have some fine black and white, Kodachrome and moving pictures. I hope we can show these during our winter dinner meetings. Room 128 with a porch overlooking the bay was given us for our cocktail lounge, and there the clan got together before the banquet.

By Thursday the following had arrived: Dick Collins, Sam Gardner, Harry Griswold, Stiles Kedy, Doc Leslie, Jim McGowan, and Harry Rapelye, to bring our registration up to 34.

As we were toasting the more recent arrivals a member of the Class of '33 showed up. They were having a reunion at East Bay Lodge but the '33 man got lost and registered at the Club and was referred to Room 128. We all thought he looked rather youthful for '08 and I guess he thought we looked a bit ancient. The matter was straightened out and we told him how to get to East Bay Lodge. We all trust he had a wonderful time at his 15th, if he got there.

We finally got to our banquet, perhaps a few minutes behind schedule. The food, as was to be expected, was perfect. No formal speeches had been planned as it seems we should be beyond that after 40 years.

Several letters from absent brothers were read together with the following telegrams: "S. S. Uruguay; Dear Nick, congratulations oughty eighters. Sorry missing reunion but forty days rotary cruise easier sailing than last forty years. Buenos noches. Joe Wattles." "Rapid



City, S.D.; Unexpected delays prevent celebrating our fortieth anniversary with you. Best regards and a happy time to all. Leo Loeb." "Fairbanks, Alaska; Very sincere hearty greetings and best wishes to each classmate present and absentees present in spirit or mind. Have been in Alaska over a year on engineering for urgently needed military projects. Have successful reunion. Technology forever. Harold E. Weeks."

Ralph Batchelder gave us a very interesting talk in connection with the new telescope at Mount Palomar, Calif. It seems that Ralph has been closely connected with the project for several years, designing and overseeing construction of many of the necessary buildings. Harry Rapelye, Jim Burch, George Whittle and others gave us a few words.

After the banquet we again adjourned to the various lounges for gossip, cards, and so on. Later, most of the group collected around the piano where Dick Collins took over. Old and new songs were sung and our reputation for close harmony was upheld.

Friday was a nice clear day. Our golfers were busy early. Henry Sewell, who lives in Norwell, Mass., had invited classmates to visit his estate. Linc Mayo, Nick Carter, George Belcher, Jim Burch, Karl Kennison, George Lees, Sam Hatch, Bill Booth, Harry Rapelye, Jeffs Beede and Doc Leslie accepted the invitation and had a wonderful time. Henry served his famous Fish House Punch which is certainly unusual. Miss Hastings, a house guest of Mrs. Sewell, happened to be an old friend of Doc Leslie's and Linc Mayo's, while Mrs. Sewell turned out to be a childhood friend of Jeffs Beede. So a good time was had by all. Some of the clan arrived at Technology on Saturday for the start of Alumni Day.

The following classmates attended the luncheon in DuPont Court: George and Mrs. Whittle and Mr. and Mrs. Ready (George's daughter and husband who is a student at M.I.T.), Linc Mayo; George and Mrs. Belcher; Leslie Ellis; Henry Sewell; Jim and Mrs. Burch; Jim McGowan; Jeffs Beede; Sam Hatch; George Lees; Harry Rapelye; Ralph and Mrs. Batchelder; Doc Leslie; Bill McAuliffe; Karl Kennison; Sam Gardner and Nick Carter.

Quite a few met in Jim Burch's room at the Hotel Statler for cocktails before the Alumni Banquet. Extra gob OT8 caps were available for those who didn't have one.

At the banquet '08 had tables right in front of the head table. The following were present: Jim McGowan, Sam Gardner, Leslie Ellis, George Belcher, Nick Carter, Sam Hatch, Henry Sewell, George Lees, Harry Rapelye, Jeffs Beede, Doc Leslie, M. P. Meade, Linc Mayo, Bill McAuliffe, Ralph Batchelder, George Whittle, Jimmy Burch.

Jim McGowan, who is now a member of the Corporation of M.I.T., went to the head table and presented President Compton with one of our '08 gob caps. President Compton put it on, stood up and saluted '08. Later he came to our tables and talked with our fellows. As you know President Compton graduated

from his college in '08, so is of our own vintage.

The first dinner meeting of the 1948-1949 season will be held on November 16, 1948, probably at the Silver Room in Walker Memorial, M.I.T. Usual reply postal cards will be mailed in due course.

We are very sorry to report the death of Ross Callaway in July. The extract from the New York Times of July 29 follows: "Handley Ross Callaway, a consulting engineer, died yesterday at his home, 375 Park Avenue. He was 62 years old. Mr. Callaway was graduated from . . . Technology. . . . Noted as an engineer of power plants, he was called in for consultations by some of the leading firms in that field. He served as a first lieutenant with the Ordnance Department in the first World War and as a civilian engineer with the New York office of the Ordnance Department during the recent conflict. He leaves his wife, Fredericka, and a daughter, Mrs. Allen F. Hollinger."

We are also sorry to report the sudden death of our old friend, Tim Collins, which occurred this past summer. Linc Mayo and Myron Davis attended the funeral, and they had a chance to talk with Mrs. Collins who has since written us as follows: "It was so nice of you to write me and also attend our simple services for Tim. He would have been very happy to have known he was so well remembered. He was on a swordfishing trip with old friends and met with a fatal accident by drowning the first day out. I used to try to get him to attend your class dinners, but it seemed such an effort to him, especially since he not been in business in Boston for a long time. He often spoke of you and others in the Class and I hope you will extend my thanks to them." We have also recently learned with regret of the death of Joseph K. Heydon, whose address was in care of the Bank of New South Wales, London, England. His death occurred in September, 1947.

We note from a recent news item that Harry Rapelye is now a vice-president of Continental Can Company at Montreal, P. Q. DON'T FORGET NOVEMBER 16. Plan to be with us and see the reunion pictures. — H. LESTON CARTER, *Secretary*, 60 Battery March, Boston 10, Mass.

## • 1909 •

Just forty years ago this fall we became full-fledged seniors and started on the year which to nearly all of us was most important since it was to be our last at the Institute. Jim Critchett, XIV, a tackle on our freshman and sophomore football teams, was our class president as is noted below, and we all know how well he directed our class activities during that last year. Although he has retired from active business, he looks almost the same as he did 40 years ago and he still maintains a most active interest in class affairs. As underclassmen all of us looked forward to that senior year, since it was to become the fruition of long hours of labor and the passing of many tough exams, and that coveted degree was well within sight. To many of us those forty years have slipped by only too quickly and almost unnoticed, and memories of classmates and of events

that occurred during those four years are still very vivid.

This fall, in a way, is analogous to that one forty years ago in that it marks the beginning of a year which is another milestone in our lives, our fortieth year out of the Institute. We can again look forward to June when most of us, we hope, will meet and renew old friendships and reminisce over those happy years at the Institute.

As was the case last year, your Review Secretary was unable to be present on Alumni Day, since he was obliged to be in Austin, Texas, and ultimately went to Mexico City to attend a convention of the American Institute of Electrical Engineers. However, Art Shaw, I, agreed to be the reporter and has submitted the following: "Attending the luncheon were: Tom Desmond, I, Delos Haynes, VI, Francis Loud, VI, Lew Nisbet, I, Gardiner Perry, VI, Chic Shaw, V, Art Shaw, I, and John Willard, II. Our representation was increased at the banquet in the evening by the arrival of: Jack Moses, VI, Julius Serra, I, and Henry Spencer, II. Brad Dewey, X, had made a reservation but was obliged to cancel at the last minute. We missed the usual number of ladies at the luncheon. In fact, Alice Desmond was the only one to attend. It is to be hoped that they were holding back this year in order to turn out in full force for our 40th reunion next year. I recently ran across Bob Keeney, III, at a business conference in Connecticut. We have not seen as much of Bob as we would like at reunions. You may recall that after two years in Course III, he completed his training as a mining engineer at the Colorado School of Mines. When the bottom fell out of mining during the depression, Bob went with the Westinghouse Company and is now industrial manager of the Connecticut Light and Power Company, one of the larger Connecticut utilities.

"Henry Spencer and I encountered a fairly strong sentiment (particularly among those living at a distance) in favor of starting our reunion in the middle of the week, continuing, say, from Wednesday afternoon until Friday afternoon, disbanding in time for the Honorary Secretaries to attend the President's dinner Friday night, and clearing the decks for attendance at the Alumni Day festivities on Saturday. Assuming that Alumni Day is to be on Saturday and not Monday, we plan to see what we can do on this basis provided you have no objection."

We have received a memorandum from Edwin S. Burdell '20, formerly Dean of Humanities at the Institute and since 1938 Executive Head of the Cooper Union for the Advancement of Science and Art, which begins as follows: "Senator and Mrs. Thomas C. Desmond, on July 18, entertained 36 men and women at their beautiful estate on the Highlands of the Hudson. Among them were three M.I.T. alumni and their wives: A. Warren Norton '21, President of Press Wireless Manufacturing Corporation and a former President of the M.I.T. Alumni Association; Thomas D'Arcy Brophy '16, President of Kenyon and Eckhardt, Inc., and also President of the American Heritage Foundation; Dr. Edwin S. Burdell '20. Other in-

interesting guests were Major General and Mrs. Maxwell D. Taylor. General Taylor was formerly commander of the 101st Air Borne Division during the Normandy invasion and the Battle of the Bulge and is now superintendent of the United States Military Academy at West Point. With him were Colonel and Mrs. Paul D. Harkins. Colonel Harkins is commandant of cadets at the Academy. Miss Sarah Blanding, President of Vassar College, was there, as was John H. Baker, President of the National Audubon Society. Mr. and Mrs. Edgar H. Betts of Troy were also present. Mr. Betts is a former president of Cluett, Peabody and Company and a former chairman of the Board of Trustees of Russell Sage College. After a delightful luncheon, Tom entertained his guests by an interesting talk on the arboretum which he has developed during the last 10 years and which now includes 636 specimens of American trees and shrubs."

Paul has been most active during the summer gathering class material and submits the following: "The other day I was lunching over in Manhattan with one of my best buddies of the days when I was with the Franklin Baker Company and then with General Foods. Ray is now one of the big shots in the sales department, a general manager of some of the sales divisions. Ray had recently been down on Cape Cod to a wedding and he was telling me he had met a Tech man at Orleans and I told him, 'Oh, it must have been Jim Critchett!' And, of course, it was our Jim! But Ray went on to tell of the fine place Jim had set up for himself and Mrs. Critchett, for you knew Jim had retired from his job at Union Carbon and Carbide and gone to the Cape. But Ray rhapsodized in telling of Jim's 'estate,' some 20-odd acres, a fine house, and particularly did Ray speak of the 'shop' Jim had set up where I got the idea Jim could make anything you please, in either wood or metal! It was all music to my ears as I told Ray how Jim was our Class President in our senior year."

From Paul: "It is my unhappy duty in these Class Notes to report the death of one of our most distinguished classmates. I refer to John Mills, VI. Our New York papers devoted an unusual amount of space to his obituary on June 16. I have unforgettable and happy memories of my own about John. He was one of the oldest of all our classmates. He was born in Illinois in April of 1880. That made his age 68. Surely all of us must remember him while an undergraduate because of the carefully trimmed Vandyke he sported. And he is noted in our senior portfolio as not only belonging to Delta Upsilon undergraduate fraternity but also to the honorary fraternities, Phi Beta Kappa, and Sigma Chi. All of us who knew John knew that he had been for many years an outstanding member of the staff of the Bell Laboratories. So I asked Reg Jones, who is a vice-president of the Laboratories, if he would give us something about John and I include it in these notes. But I want to add a personal word about John. I cannot, to be sure, say that I knew John at all well. In fact, he was not one with whom one could get chummy. His mind seemed always to be on far bigger things than

passing the time of day with me. John lived over at Millburn, not over 10 miles from my town of Glen Ridge here in New Jersey. John came often to our class luncheons and after the speaker had finished his address, John soon naturally dominated the discussion. In fact, to me it was always a rare treat to listen as John told us some of his own pet theories no matter what was the subject under discussion. What he said might not mesh with what our speaker had told us. But that made John's remarks all the more interesting. As you listened to him, you knew that you were hearing the views of a forceful and brilliant scientist. I used to see him often in the Hoboken terminal as I was taking the ferry to Barclay Street. He was bound for the Bell Laboratories on West Street in Manhattan. And now and then over the week end I used to drive over to call on him at the comfortable home nestled in a valley of the Watchung range of the Orange Mountains in Millburn. When John retired in 1945 from the Laboratories and after Mrs. Mills' death, he went to Pasadena to make his home and you'll see from what Reg has written that he took an assignment at Caltech as a guidance adviser to the students about their plans for careers after graduation. John must have been a perfect natural for that job! I envy any boy who could talk with John about his future. I feel that I have lost a dear personal friend and we are all the poorer as we lose a classmate like John Mills. And here follows what Reg Jones has written about John. Thank you, indeed, Reg!"

"John Mills died on June 15 while on a visit to his son, John Jr., at Rochester, N.Y. Many classmates will remember Mills as the tall, sandy-complexioned student with the reddish Vandyke. In his later years he was a regular attendant at our New York luncheons where his sparkling ideas often made him the center of an interest group. John was married to Emma Gardner Moore, who died two years ago. In addition to his son, he is survived by two daughters, Mrs. F. F. Giannini of Far Hills, N.J., and Miss Theodora Mills of Chevy Chase, Md. When John retired from the Bell System in 1945, after more than thirty years of service, he was director of publication of Bell Telephone Laboratories. In the early years of his career, Mills was one of the key figures in the development of transcontinental and transoceanic telephony. His early work in radio transmission led to his teaching radio to Army officers during World War I. He was director of personnel of Bell Laboratories for a time and developed some of the earliest psychological methods for the selection and guidance of young engineers. As director of publication he founded the 'Bell Laboratories Record,' an expository periodical for communications research and development. He planned Bell System exhibits at the World's Fairs at Chicago in 1933, and at New York and San Francisco in 1939. These spectacular displays of scientific advances excited special interest due to the audience participation features which Mills introduced. John was also an author of note. Some of his books were *Within the Atom*, *Letters of a Radio Engineer to His Son*, *Realities of Modern Science*, *Radio Communication*, *A Fugue*

*in Cycles and Bels*, *Electronics*, *Today and Tomorrow*, and *The Engineer in Society*. Since his retirement in 1945, Mills had been living in Pasadena and had given a part of his time as guidance adviser to students at the California Institute of Technology."

We also have a notice of the passing of Edward F. Orchard, II, retired musician, at Point Pleasant Hospital, N.J., at the age of 63. Over the years we have little to record of his activities. Paul remembers him, stating that he sang "basso profundo."

Paul also tells of the passing of one of our instructors in physical chemistry: "The newspapers of Labor Day, September 6, noted the passing of Richard C. Tolman '03 whom I can only think of as 'Dick' Tolman, for he was my instructor in physical chemistry as a third-year subject in 1908. I know that I, as one of his pupils, always liked Dick. He went to the California Institute of Technology before the first War and was closely associated with Dr. Einstein. Dick worked on problems connected with the development of the atomic bomb. I feel that I have lost a good friend." — PAUL M. WISWALL, *Secretary*, 90 Hillside Avenue, Glen Ridge, N.J. CHESTER L. DAWES, *Review Secretary*, Pierce Hall, Harvard University, Cambridge 38, Mass. *Assistant Secretaries*: MAURICE R. SCHARFF, 285 Madison Avenue, New York, N.Y.; GEORGE E. WALLIS, 1606 Hinman Avenue, Evanston, Ill.

## • 1910 •

I am writing these notes the day before I start on my vacation and I hope that I have not overlooked any letters or news clippings that may have been sent to me. The big news of the members of the Class is, as usual at this time of the year, about those who attended Alumni Day in June. This year we had 10 members attending the festivities. At the luncheon were: Jack Babcock, Bob Burnett and Mrs. Burnett, Art Curtis, Carl Sittinger and his daughter, Myrton Turnbull and Mrs. Turnbull, Cliff Waldo and your Secretary. We had a table together and had a most enjoyable time. After the symposium several of us went out to Carl Sittinger's home where we were so well entertained we were late for the Alumni Banquet. In addition to those at the luncheon, the following attended the banquet: Karl Fernstrom, Harry Hale and Carl Lovejoy.

The television set given by the Class to Ed Stuart is now in operation and is greatly appreciated. I have been told that previous to its installation, Ed had his lights out by eight-thirty; now they are on until the last program is through. — Charles Clark has been honored by the American Institute of Architects. The following is the citation: "Cameron Clark, New York, N.Y. Admitted to the Institute in 1922, has been advanced to Fellowship for outstanding achievement in the design of private residences and especially his studies of indigenous Connecticut architecture. He has been a valuable member of the New York Chapter in promoting the study of civic design which he has practiced in exemplary manner as Advisor to the Borough President of Manhattan."



I am sure that we are all interested in the following, as Charlie Greene's wife was such a grand hostess at our five-year reunions: "Mrs. Charles E. Greene of Winchester, former president of the Mt. Holyoke College Alumnae Association, was elected yesterday to a five-year term as alumnae trustee. She also is a member of the Winchester school board." — HERBERT S. CLEVERDON, *Secretary*, 120 Tremont Street, Boston 8, Mass.

## • 1911 •

There were a baker's dozen '11 men at the June 12 Alumni Day luncheon at the Institute and then an exact dozen at the annual banquet at the Hotel Statler in the evening. Naturally all of us present at the luncheon stayed for the symposium on "Logistics of Peace" because one of the three speakers was our own Bob Haslam, X, whose fine talk on "World Energy and World Peace" was printed in the July Review.

Those attending the luncheon were John Alter, IV; Bill Coburn, I, XI; George Cummings, VI; Monk deFlorez, II; Dennie, VI; Fred Harrington, I; Bob Haslam, X; Jack Herlihy, II; Carl Richmond, I; O. W. Stewart, I; Ted Van Tassel, X; Emmons Whitcomb, X, and Aleck Yerance, I.

John Alter reported that his firm of Pearson, Alter and James, architects and engineers, 351 Essex Street, Lawrence, is enjoying fine business at the present time. Monk deFlorez, who flew Lester Gardner '98 over from New York with a wealth of presents from air lines in all parts of the world for Mrs. Compton, reported that his son, Peter deFlorez '38, was married on June 5 to Mrs. Suzanne Humphreys Ford, daughter of Mr. and Mrs. Landon Humphreys of New York City, in the Park Avenue Christian Church, New York. "She is an unusual gal," said Monk, "who spent most of the war ferrying Spitfires and Hurricanes for the Royal Air Force — so you see, we are trying very hard to maintain the flight traditions of the family." Monk also said that Ed Goodwin, VI, is now working for the deFlorez Engineering Company, 31 West 47th Street, New York City. — Another junior 1911 marriage took place on September 2 at Milton, when C. H. S. Merrill's daughter, Constance Southworth, became the wife of Richard Morgan Cameron, Jr. To both these young couples go our best wishes for happiness.

With the exception of Bill Coburn and Monk deFlorez, all of us present at the alumni luncheon attended the banquet, where we were joined by Uncle Roger Loud, VI, to make up the dozen. Your Secretary, as usual, led the songs and cheers.

Two weeks later it was my great pleasure to be the guest of the Class of 1928 at its 20-year reunion at the Wianno Club, Osterville. This group spent its four years at the Institute during the last four years of my five-year term as executive secretary of the Alumni Association. During the class banquet I was elected an honorary member of the Class of 1928 — a much cherished honor. My thanks also to the many classmates who have sent congratulatory notes on my midyear election as

second vice-president of the Alumni Association.

Orchids to two of our classmates who received honorary doctorates in June; Carl Ell, XI, an honorary doctor of laws degree from Tufts College, and Cap Maguire, I, an honorary doctor of science degree from Holy Cross College. Dr. Ell had a busy day on June 20, for at 11:00 A.M. he conducted the 46th annual commencement exercises at Northeastern University, which he heads, and then rushed over to Medford for his Tufts College degree.

The citation read: "By your wisdom and administrative skill in the direction of a large and complex university, you are assisting in the great work of making all America stronger through the ennobling power of higher education. To you, Carl Stephens Ell, the honorary degree of Doctor of Laws." A week earlier Carl had addressed the graduating class at Newburyport High School on "Wings of the Future."

Up at Holy Cross College in Worcester on June 9, Cap Maguire, who heads his own engineering concern, Charles A. Maguire and Associates, Turks Head Building, Providence, R.I., was one of four honorary-degree recipients. His citation read: "All the world has learned to marvel at the engineering genius of America. A practical know-how seems to be almost an ingrained attribute of the American character, and the accomplishments of her engineers have greatly advanced our modern civilization. From among the outstanding in the nation the College of the Holy Cross chooses to honor Charles Augustus Maguire. In his field he had always proven to be that rarest type of engineer; the builder with vision, alert to the humanistic values of the project, aware always of the social benefits or the national security inherent in the work. He has striven to harness natural powers and resources, to work with things, because it would benefit man; and we who know the man, his fine sympathy, his scholarly humaneness, have marked with pleasure the many commendations he has received from federal, state, civic and military authorities. Today's honor, bestowed as it is upon a man so noteworthy in his profession, is likewise deserved by his true and courageous spirit, his high sense of honor and unswerving devotion to ideals."

George Kenney, II, was in Boston September 19 for the local celebration of Air Force Day. In an interview preceding the exercises at Bedford Airport, George, who on September 20 was named head of the Air University at Maxwell Air Force Base, Montgomery, Ala., said present bombing planes "are through for military purposes — the future engine is the jet," and added that present craft are "obsolete as the old flivver automobile. George spent Sunday with his sister and brother-in-law, the L. Gordon Glaziers, VII, at their new home, Ledgewold, Lincoln, Mass. The Glaziers gave up their long-time home at 4 Egremont Road, Brookline, in mid-July and now have a year-round home in Lincoln.

That the age of miracles is not dead is clearly evidenced in a recent welcome letter from Julius Waldstein, I, who is now located at 184½ Summers Street, Charles-

ton, W.Va., and for business purposes has taken the name of Joseph Webb. He is a consulting engineer there and said he recently met Charlie Hobson, X, plant superintendent at Barium Reduction Corporation in South Charleston, at an M.I.T. club dinner. Ever since childhood, Julius has been threatened with blindness, and you'll remember that during his four years with us he had to use very strong glasses. In October, 1947, Julius had an operation on his left eye and apparently just what was needed was accomplished, for he writes that he is "now able to read the vernier on my surveying instrument without a vernier glass and can read three-point type without glasses!"

In a T-Day chronological record of television's progress in the Boston Sunday *Herald* of June 6, the following appeared: "1924: Capt. Richard Ranger sent first facsimile picture from London to New York." Remember that? In a letter a few days later Dick, VIII, President of Ranger-tone, Inc., Newark, N.J., wrote: "Ranger-tone (electric music) is going strong; we are about back on our feet after the war years which put all of us under the colors. Magnetic tape recording is our prime objective and the high fidelity, broadcast type of equipment is our meat. We came out on top in a Bing Crosby test about a year ago against other types of recording; and more recently the Mutual system has been using our equipment as an aid in the rebroadcasting of programs delayed one hour because of the time difference between cities on or off daylight saving time. Units are now in Spain and Mexico also. In addition, we have been doing some consulting work, particularly for a new electric organ. While in Germany I took the opportunity to learn everything being done in Europe along these lines and our recent work is built on this information. I have a grandson a year old who is holding his own in the Navy colony at Norfolk, Va. Liv Ferris, VI, has surely done an excellent job as program chairman for the M.I.T. Club of Northern New Jersey."

A. T. Cushing, I, in a letter reporting that the Department of Agriculture's Production & Marketing Administration, with which he is associated, has changed its office address to 2411 Fidelity Building, Kansas City 6, Mo., writes: "My daughter, Emma Mae, who has been technician at Research Hospital here has now taken a similar position in a hospital at Tulsa, Okla. My younger son, Gerald, is spending the summer working at the Young Men's Christian Association camp in Estes Park, Colo. He graduated from high school this spring and will enter Baker University at Baldwin City, Kansas, in the fall to study business administration. My other son, Don, expects to enter the United States Air Force for a three-year term beginning in mid-July."

Frank Osborn, III, who is with the Andes Copper Mining Company in Potrerillos, Chile, S.A., is mighty happy — and well he might be — for his son, Robert, has been accepted for admission at M.I.T. this fall. In sending along these glad tidings Frank adds: "I am so sorry to hear about Pete White, II. What a fellow! He was a friend of everyone and everyone knew

him. Who could forget that brogue, grin and good nature. He could make us all laugh without trying. We never knew what he would pull next. He'll be up there with his patron Saint Peter at the pearly gates, waiting for us who 'make the grade.'" Bill Warner, I, writes from Nowata, Okla.: "There is no news from here of interest. I have been in the registered cattle business for a number of years, more as a hobby than anything else. The cattle were recently sold at an auction and the ranch is now for sale. It became a problem to get labor and the problem of feed also became quite an item. It is pretty strenuous work, especially in the hot summer weather when crops have to be gathered."

In a mid-summer "Let's Explore Your Mind" syndicated feature by Albert Edward Wiggam, D.Sc., which I see daily in the *Worcester Telegram*, there was a reference to Edward C. Tolman, XIV, professor of psychology at the University of California. Ed was quoted as saying that personalities are subject to change under repeated duress. I sent the clipping to him for comment and he replied: "I don't quite know where they found these words of wisdom of mine, but at any rate I agree to them." Ralph Walker, IV, of the New York firm of Voorhees Walker Foley and Smith, architects for such structures as the New York Telephone Building, the Irving Trust Building and telephone buildings in Washington, D.C., New Jersey, and the state of New York, was one of two official delegates chosen to represent The American Institute of Architects at the first congress of the International Union of Architects at Lausanne, Switzerland, June 28 through July 1. Ralph, you will remember, is a holder of the Gold Medal of the Architectural League of New York.

In June, here in Gardner, Stan Hartshorn, X, was named to the investment board of the Gardner Savings Bank. He is one of the vice-presidents of the bank and for many years has been chairman of the auditing committee. Announcement was also made in mid-September that Stan and his brother, Henry, with whom he operates C. H. Hartshorn, Inc., furniture and baby carriage manufacturers had presented a composite photograph of Gardner's World War II dead to the Gardner Post of the American Legion, as did their father, C. H. Hartshorn, former State Senator, after World War I.

Louis Golden, VI, 709 Centre Street, Newton 58, served most effectively as 1948 campaign chairman of the Greater Boston Combined Jewish Appeal in September. Lou has been active in communal affairs in Greater Boston for the past 13 years. They have one son, Dr. Theodore S. Golden of Framingham, a children's specialist.

Again 1911 is off to a splendid start in Alumni Fund IX, for the August 31 figures show us with 124 subscribers (103 per cent quota) subscribing \$2,617 (94 per cent quota), which is exactly the same quota percentage as 1912; making us tie for fifth place among the classes. However, our 103 per cent quota for number of subscribers ties us with the Class of 1891 for first place. We have a mark of

143 subscribers giving \$5,596.50 in 1947-1948 to work for this year.

Since November 7 is a Sunday this year, we'll have to have our annual class dinner a "Seven plus one Come Eleven" party on Monday evening, November 8, in the Silver Room at Walker Memorial. Make it a point to be there if you can be in or near Cambridge at that time. — ORVILLE B. DENISON, *Secretary*, Chamber of Commerce, Gardner, Mass. JOHN A. HERLIHY, *Assistant Secretary*, 588 Riverside Avenue, Medford 55, Mass.

## • 1912 •

At the Alumni Day activities in June, Frederick W. Barker, Harvey S. Benson, Jerome C. Hunsaker, Charles C. Jones, John S. Selfridge and Cyrus F. Springall were reported by Harold G. Manning to be in favor of having another reunion in 1949. They feel that it is too long to wait until the next regular date in 1952. This desire shows how much the last reunion in 1947 was enjoyed by those attending. The officers must know the attitude of the Class to this proposal, so that a committee on arrangements can be appointed if enough interest is shown to warrant it. Will you please drop a line to Les White promptly, informing him whether or not you are in favor of another reunion next June and do it now!

We regret to report the passing of D. M. Wyman, II. The following notice appeared in the *New York Times*: "Providence, R.I. — July 19 — Dwight Mead Wyman of near-by Barrington, engineer, yachtsman and production manager of the Tropical Tool Company of Westerly, R.I., died here last night in the Roger Williams Hospital at the age of 58. Born in Montclair, N.J., Mr. Wyman was a graduate of M.I.T. During the war he served as a commander in the Navy and was wounded in action on Guadalcanal in the fall of 1943. Earlier he was instructor at the Navy's landing craft school at San Diego, Calif. He was navigation instructor and a past commander of the Narragansett Bay Power Boat Squadron. Surviving are his widow, the former Corene B. Foster of Boston; a daughter, Miss Corene Louise Wyman of San Diego, and three brothers, Walter M. of Prospectville, Pa., Elbridge W. of Winchester, Mass., and George F. Wyman of Depue, Ill." — We also regret to record the deaths of the following men, notices of which were only recently received without details: Dr. Walter F. Harvey, I, March 27, 1947, at Everett, Mass.; Joseph E. Harrington, VII, of Haverhill April 30, 1947; and John S. Martin, II, of San Francisco August 5, 1947.

Jerome C. Hunsaker, XIII-A, was recently honored by being made an honorary commander of the civil division of the Most Excellent Order of the British Empire. — Some time ago, Ted Marceau, X, wrote that he really had in mind sending a resumé of his activities as it distressed him in the past to find so little about the Class in *The Review*, but it never occurred to him to make any contribution until the time of the reunion. He has now sent a summary of his activities since graduation. After spending a year

on the instructing staff at the Institute, he entered the employ of the N. K. Fairbank Company as control chemist and remained with that company and its subsidiaries and successors until 1939. He became factory manager in 1918, chemical director 1918-1923, manager of the manufacturing department of the Gold Dust Corporation until 1937 and director of research and development of Hecker Foods until 1939. He then became supervisor of research for Lever Brothers Company for seven years. Since 1946 he has been a consulting engineer and consultant on patent litigation. In 1922 he married Sadie I. Ingram. They have three children, Mary J., Nancy L. and Jeanne E.

Fred Shepard, Jr., has just returned from a seven-weeks trip abroad and promises to send an account for the next issue. — Alfred P. Morgan, II, has written a book on *Tools and How to Use them for Woodworking and Metal Working*, which is illustrated with 600 drawings by the author.

Joseph L. Champagne, III, in answer to Jim Cook's questionnaire, writes that he has dancing schools in Boston, Providence and Tiverton, R.I. He has his own radio show on WEAN, Providence every Tuesday night from 8:00 P.M. to 8:15 P.M. He and his wife, Libby, have a son, Dick, 23, who graduated from Cornell in 1946 and is now working with him, and a daughter, Dodie, 22, who has become a junior executive at Filene's, after graduating from Vassar in 1946. His hobbies include sailing and gardening at his farm in Tiverton. He modestly refrained from telling about the time he fired Rudy Vallee, but we have the following account from the Cranston, R.I., *Herald* of April 22: "Joe Champagne, well-known dancing master, once fired Rudy Vallee, when the band leader asked for a raise. Vallee quit and subsequently became famous, but he has always maintained that if Joe had not fired him, he might still be playing with Champagne and might never have become an international sensation. Mr. Champagne started out to be a mining engineer, but shortly after graduation from M.I.T. decided that there must be an easier way to make a living. He took up dancing and shortly was one of Boston's leading dancing teachers. Vernon and Irene Castle were personal friends of Mr. Champagne — whose wife, Libby, was adjudged one of Boston's 10 best-dressed women last year by the *Boston Post Fashion Experts*. Mr. and Mrs. Champagne and their two children are now Rhode Islanders, having a 15 acre farm in Tiverton, called Dunromin. Teaching dancing by radio is not a new venture, either for WEAN or for Joe. Having travelled all over Europe and most of the rest of the world. Mr. Champagne has collected a great fund of knowledge of dancing and every now and then bits of this knowledge make interesting asides in his broadcasts. Champagne is his real name — and no man was ever more aptly called."

Jim Cook, our star news-gatherer, writes: "I met Charlie Cabeen's father, John Cabeen, at the Salem Rotary Club and had the pleasure of chatting with him. John is in his eighties. He is actively engaged with Charlie in the plumbing



business which John established a half century ago. I hope I can grow old as gracefully as John Cabeen because he is able physically and keen mentally. He has the faculty of talking pleasantly about many things so that the luncheon period passed very quickly. Some personal news about Charlie appeared in the July issue." Jim also reports that he is still getting a great deal of fun out of photography. Congratulations to James H. Morley, III, for 25 years superintendent of the American Rutile Corporation at Roseland, Va., who has been elected vice-president and director. Jabez H. Pratt, X, writes that he recently had the privilege of showing his Mexico movies to John Lenaerts, VI, and Mrs. Lenaerts, who were in Chicago. John is now with the Union Bag and Paper Company and will probably spend more or less time in Chicago, as they are starting a new plant there.

In closing the Notes for the first number of the new season, we again wish to remind you that we need the help and co-operation of every member of the Class in order to get out the kind of Notes you want. Please send us word of your activities and DO IT NOW! — FREDERICK J. SHEPARD, JR., *Secretary*, 31 Chestnut Street, Boston, Mass. LESTER M. WHITE, *Assistant Secretary*, 4520 Lewiston Road, Niagara Falls, N.Y.

## • 1913 •

Our 35th reunion was the best ever. The New Ocean House at Swampscott was ample in every way for our large gathering, and that was fortunate because of the chilly, damp weather. We had come together to visit and have a good time, and the Ocean House provided all the facilities. The high lights in the program were: Friday, June 11, luncheon, cocktail party at five o'clock and class dinner; Saturday: alumni dinner at the Hotel Statler, and the Pops concert at Symphony Hall for wives and guests. Bill Mattson and his committee had done a painstaking job and gave us perfect arrangements; from registration to finish everything ran smoothly. Bill Ready presided at the lively, talkative luncheon on Friday. Frank Achard got a big hand when he appeared, just after 60 of us had sat down, wearing the orange and black 1913 costume, smock and matching beret, which Heinie Glidden had designed for our gathering on the beach in 1916, as a part of the ceremonies in connection with the dedication of the new M.I.T. site. Remember the panorama picture taken on the beach? Time out was taken for some matters on the thoughtful side: Bill Mattson suggested that we send a resolution to Dr. Compton in praise of his achievements, and Charlie Thompson was asked to head a committee for this purpose. Geoff Rollason told us about his recent meeting with Lammie Lemaire, in Australia. Hildie Carlson spoke about the experiences our General, Al Jones, suffered in the Philippines. Messages of greeting were sent to Lammie and Al, and flowers were sent to Al Conant who has been long confined by a painful illness. I have bragged about Bill Mattson earlier. Evidently Pa Ready suspects what I know, that Bill gets much help from his wife,

Mabel, for Pa made a presentation to Bill and Mabel of two handsome silver Ronson lighters. The luncheon served to break the ice and set up just the proper prevailing spirit of informality.

The cocktail party got under way promptly at 5:00 P.M. In all, more than 100 attended. Our star performer is Dave Nason, but he left after the luncheon. While I was looking in vain for Dave, among those who caught my eye was Geoff Rollason, certainly a man of distinction and propriety. John Hession, the most reticent of men, ventured that he could really waterproof a basement and for a figure not to exceed the original cost of the house. Gene Macdonald told a group of Course I men how simply George Starr puts concrete reinforcing wire under predetermined stress, to prevent cracks. While the wire is being tightened with a turn buckle, George plucks it like you would a banjo string and he knows exactly the right pitch at which to stop, anywhere between 30 and 20,000 vibrations per second; such remarkable ears has he. George himself told us about the wonders which John Hession works with the use of wire and iron filings to prevent cracks and leaks in concrete. It was a grand party, and it whetted appetites for the good dinner, which followed almost immediately. One hundred and twenty-five persons sat down to an excellent dinner at which one had his choice of steak or lobster. Bill Mattson presided. Eschewing speech making, Bill started the affair off with a few appropriate words and presented flowers to our class grandchild, the 16 year old and winsome, Neva the second. Al Townsend asked us to stand while he read the names of 35 classmates who died in the last 10 years. (Ten years ago Al read a list of 66 dead, making a total of 101, since 1913).

Professor Prescott was our guest of honor, and he entertained us with a well-told Down East story. During dinner a lady entertainer circulated about the room playing the accordion and sang popular songs of years past. Outstanding after-dinner performers were Joe MacKinnon and Phil Capen. Joe, outfitted with a black wig and handlebar mustache, as one of a barbershop quartet, made facial expressions which were really funny, and Phil's ragtime dancing was amazingly agile, and rhythmic. We were 44 strong at the alumni dinner, in Boston, and had the second best location, next to the 50-year class of '98. Our Class President, Bill Ready, sat on the stage with other dignitaries.

The following lists of persons attended all or part of the events on our program. The first alphabetical list contains those whose wives attended. The second alphabetical list shows those who were alone: Francis H. Achard, VI; Clarence J. Berry, VI; Harry Braude, X; Ellis W. Brewster, II; Arthur L. Brown, II; Charles W. Brown, XIV; Allison Butts, III; George P. Capen, X; Hilding N. Carlson, VI; Arthur W. Carpenter, X; Silas H. Champlin, V; Paul V. Cogan, II; Harold E. Crawford, IV; Howard S. Currier, II; George S. Darling, IV; Stanley H. Davis, VI; William N. Eichorn, XI; John B. Farwell II; Warren E. Glancy, X; Lester C. Gustin, I; John H. Hession, I; Gordon G. Howie, I;

Edward Hurst, II; Edward E. Jewett, II; William R. Mattson, I; Bion L. Pierce, X; Nathan H. Poor, 2d, X; Robert T. Portal, VI; William A. Ready, VI; Kenneth W. Reed, II; James C. Russell, II; Nathaniel McL. Sage, I; Carl L. Stucklen, IV; R. Charles Thompson, X; Robert Weeks, VI; Louis E. Wright, XIV.

Paul W. Bartel, II; Kenneth B. Blake, XIV; Robert D. Bonney, X; Emerson L. Bray, VI; Clarence W. Brett, I; Allen F. Brewer, III; Edward H. Cameron, I; Burton L. Cushing, II; Charles G. Fallon, III; John J. Harty, IV; Raymond B. Haynes, I; Fred C. Hersom, VI; Halsey B. Horner, IV; Eugene L. Macdonald, I; Joseph C. MacKinnon, VI; Frederick D. Murdock, I; David V. Nason, XIV; Robert B. Nichols, I; Louisa M. Norton, M.D., V; Geoffrey M. Rollason, X; Allison P. Smith, VI; Frank T. Smith, XIV; George H. Starr, I; George H. Taber, Jr., X; Edward G. Taylor, XIV; Arthur L. Townsend, II; Robert J. Tullar, II; Andrew Vogel, IV; Ernest Weller, VI. Guests at Ocean House were: Lester Gustin, Jr., and Mr. and Mrs. James Gustin; Robert H. Hurst; Janet Mattson; Mrs. Neva Ready Baine, Miss Neva Baine, Miss Elizabeth Lewis. Tom Byrne, IV, came up from Fort Worth, Texas, for the class dinner on Friday. Jim Beale, XI, Warren Gentner, I, Heinie Glidden, IV, Joe Cohen, X, and Charles Walton, VI, joined us for the alumni dinner at the Hotel Statler.

Dr. Effie Macdonald Norton, V, as a result of passing the required examination, was made a Diplomate of the American Board of Pathology, and last fall she was elected a Fellow of the College of American Pathology. Gene Macdonald is living on a farm, in Pennington, N.J. Gene, always longheaded, made this move with retirement in mind. Howard Currier modestly admitted that he had quite a little to do as chief engineer with the Ford "Forty Niner" which was unveiled at the Waldorf the following week. Charles Walton has an odd job, for an electrical engineer by training. He is a professional business administrator for members of the movie colony in Hollywood. For his clients, among them Victor Moore, he handles all business matters, and in some cases he employs agents. Ed Cameron continues to pursue his hobby of writing and gave me a copy of his latest illustrated brochure, *Mental Cramps of the Engineer Writer*. I devoured its contents, which I embraced, but am sorry to say it didn't help to relieve my cramps while grinding out this story. Did you notice in the with wives list two names that didn't seem to belong there? They do, for the Class has two blushing, recent bridegrooms. On May 8, Arthur Carpenter and Irma L. Coon were married in Washington, D.C. They had met while both were working for the War Production Board in 1942. Jack Farwell was very proud to introduce his wife, the former Jeanne Byrne, of New York City. Congratulations to Arthur and Jack for having won the hands of two such charming and attractive ladies. From Al Townsend I learned that Al Butts has written two outstanding textbooks: *Engineering Metallurgy*, with Bradley Stoughton '96, and *Metallurgical Problems*, alone. Both

books are used at the Institute. Bill and Ellen Brewster told about the coming marriage of their daughter, Lydia, to Henry Wolcott Toll, on September 11 at Plymouth. Joe and Mrs. Cohen were absent because of the sudden death of Joe's close friend Rabbi Liebman. John Blatchford, III, died on March 11 in Chicago.

Dr. Compton sent this gracious letter to Bill Ready: "I beg to acknowledge with very sincere appreciation the resolutions which were adopted by the Class of 1913 on the occasion of its 35th reunion at Swampscott, Mass., which you and Mr. Murdock so kindly forwarded to me. These kind words are a source of encouragement which I hope may be reflected in more effective service to our Institute in the remaining years which lie ahead. I cannot imagine that any college president has ever been blessed with so fine a group of associates as I have been privileged to work with during the past eighteen years. This can perhaps best be described by saying that experience has taught me never to have the least worry about the satisfactory and effective handling of any matter which is in the hands of my associates on the administration and teaching staff. Furthermore, the spirit of good will, co-operation and enthusiasm makes this work a joy. It was a source of great satisfaction to see such a fine turnout of the alumni at the reunion and the banquet last Saturday, and the Class of 1913 held a prominent place. I trust that, outside of the rather threatening and dismal weather, your reunion was a great success."

Hildy Carlson had the following from General Al Jones: "Your cable arrived June 18 and filled me with happiness. I cannot express adequately my appreciation of the thoughtfulness of my classmates in singling me out for so great an honor. I shall cherish the resolution always. Although under the law I may remain in active service until the summer of 1952, it is quite possible that this present assignment will be my last. Of course if there were a real prospect of another international crisis I would hang on and do my best, but I do believe the international situation will clear up now that we have embarked seriously on a program of preparedness. Therefore, I feel that when my job here has been accomplished successfully, I should step out and make way for a younger, more active replacement. Moreover, I feel that I am entitled to a little pasturing after the strenuous past, so don't be surprised if I drop in on you the fall of '49 as a civilian. Dickie has just returned by air from San Francisco where she underwent a major operation some two months ago. She and the two grandsons are fine. Will this letter suffice to express my appreciation to the Class of 1913? If not, please suggest the means which I should employ to convey my appreciation to my classmates." Al is chief, United States Military Advisory Group to Philippine Republic, stationed at San Francisco. Albert Conant wrote: "Will you please convey my thanks to the Class of 1913 for their thoughtfulness in sending me the beautiful gladiolus. It was such a pleasant surprise to be remembered at the reunion. I have had two of a series of four operations for the removal of ribs. The third

will take place on Friday. So far things have gone satisfactorily except for plenty of pain but I suppose that is to be expected. My best wishes to all."—FREDERICK D. MURDOCK, *Secretary*, Murdock Webbing Company, Box 788, Pawtucket, R.I.

## • 1914 •

June 12 proved to be another in the long list of delightful Alumni Days where 1914 classmates added their own pleasant meeting at the Engineers Club to the regularly scheduled events. Those attending were Blakeley, Clisham, Crocker, des-Granges, Fales, Hamilton, William Jackson (honorary member), Mayo, Morrison, Peaslee, Sutherland, Trufant, and your Secretary. In addition, Crocker, Mayo and Morrison had their sons—all Technology men—present. At our class meeting, we were also joined by three of our friends on the Institute staff. After the dinner, Art Peaslee and Dave Sutherland left for Florida to bring Dave's cruiser up north to Albany, N.Y. Dave is currently president of the M.I.T. Association of Minnesota.

Crocker reported that he had just seen J. J. Rucker Bristow in Philadelphia, where both were attending a conference of the Institute of Food Technologists. Bristow's citrus concentrate plant is in Dunedin, Fla.—Vernon Tallman was unable to attend the Alumni Day meeting because it conflicted with a Tallman family reunion being held in Newport, R.I. In recent years Tallman has arranged for the Engineers Club meetings.—Colonel Storke's office sent regrets as Pete was in Vienna where he had just returned after presiding at the War Crimes Trials at Salzburg. Leigh Hall, a regular Alumni Day attendant, sent regrets from Rio de Janeiro, where he was attending an International Rotary Convention. The currently most traveled absentee was Alden Waitt, who wrote from Puerto Rico that he had expected to be present but had to go to the Caribbean area, from which he had only recently returned. Just by way of variety, Alden has taken several trips this spring around this country, as well as an overseas trip to Belgium, Germany and England this summer. While in Belgium, Alden was the delegate of the National Research Council to the International Congress of Industrial Chemistry. Practically all of Alden's trips, domestic and foreign, are by air.

Harry L. Bowman, who is head of the department of civil engineering of the Drexel Institute of Technology, has served as director of the structural damage division of the United States Strategic Bomb Survey.—Francis Gilbert is chief of the Hydrology and Hydraulics Section of the Corps of Engineers at Boston.—Remaining in the Army after the War is E. L. Osborne, colonel, U.S.A., who is management economist in the office of chief of Staff of the Army Comptroller.—Frank Ahern has again made his western trip to inspect parks for the Department of the Interior. Frank still insists that it is hard work. His son, Dick, who is a student at Technology, also seems to be getting a great deal of fun out of his work at the

Institute. Not only has he made good grades but he has also received several extracurriculum awards. The Boston papers also showed him in the company of a very attractive young lady at a ball for this season's debutantes.

Your Secretary recently learned that Roger Williams, who is an officer of Du Pont, some time ago received the Presidential Medal of Merit, the highest civilian award, for atomic bomb work. Williams was in charge of the special Du Pont organization which worked on the atomic bomb. Your Secretary is happy to say that he also received this award last June for his war work in the field of guided missiles.—Our honorary classmate, William Jackson, has sent your Secretary a list of names of 23 men of our Class who served in the military services during the recent war. Space does not permit the publication of the list here, but it is hoped that it can be included with our 35th-reunion literature. There were one rear admiral, two major generals and one brigadier general.

Regretfully we announce the death of another classmate: Fred Frost Wiggin died on May 26, 1947. He was an instructor in the Lowell Vocational School.—Dave Gould is now assistant operations manager of the chemical division of the Borden Company at Philadelphia.—H. R. Russell is general sales manager of Tinnerman Products, Inc., of Cleveland.

The first reunion dates ran into several conflicts, but it is now possible to announce a change to June 17–June 19. The place is the same; namely, the Sheldon House, Pine Orchard, Conn., just out of New Haven. Detailed information will be sent out during the winter and spring. Make a note, however, of the date now and plan to attend.

The earlier dates were in direct conflict with graduation programs of sons and daughters of many classmates. Bill McPherrin writes from Kansas City that either week end will be out from his point of view, as his son expects to graduate from Hanford College on the West Coast on the former week end and to be married on the next. Ross Dickson and Frank Dunn have daughters who expect to graduate from Wellesley the early week end, and were both very happy to have the date moved up. Considerable enthusiasm for the reunion has already been indicated, so a good attendance seems certain.—H. B. RICHMOND, *Secretary*, General Radio Company, 275 Massachusetts Avenue, Cambridge 39, Mass. CHARLES P. FISKE, *Assistant Secretary*, 1775 Broadway, New York 19, N.Y.

## • 1915 •

Here beginneth the first column of this year's Class Notes. Well done, good and faithful classmates. One hundred forty-four of you paid your class dues—go, thou, with my many thanks. On a summer trip to Detroit, Frances and I had a fine time visiting classmates enroute. In Akron we had dinner and spent the evening at the University Club with Norris and Mrs. Kimball and Parry Keller. At the last moment Herman Morse and Phil Small (from Cleveland) couldn't make it. In De-



troit, we found that Loring Hall was at Oyster Harbors — we hope preparing the way for our 1950 reunion there. In Buffalo, we missed the Hiltons who were visiting in Gabe's home town, Oshkosh, Wis., but we had our usual dinner and gay evening at the Buffalo Country Club with Ben and Margaret Neal. In Cortland, N.Y., we had lunch and a visit with Otto and Mrs. Hilbert. Otto has a valuable collection of rare glass pieces attractively displayed in specially constructed and lighted cabinets. In addition to this hobby, Otto raises beautiful bulb begonias. The road to Wellsville, N.Y., was blocked by construction so we were unable to get through to see Bill McEwen. He and Ben Neal were to play golf the day we left Ben in Buffalo. In New Haven, after dinner with Vince Maconi and his family, we had an interesting tour of the city with Vince's intimate knowledge disclosing more of Yale University than we had ever before seen. Vince has done a lot of construction work for Yale. His son, Richard Curtis Maconi '44, is associated with Vince, who is president, in the Dwight Building Company, New Haven. His other son, Norman, is a Yale junior. They're both G.I.'s. His daughter, Lois, is a junior at Bryn Mawr — a lovely family. Just before leaving for New Haven we heard from the ever reliable alumni office that little Andy was in New Haven with the Connecticut State Highway Department. So we looked him up and lo and behold Andy is chief consultant for the State on twin tunnels 200 feet long which they are drilling through East Rock in New Haven as part of the extension of the famous Merritt and Wilbur Cross Parkways to join the turnpike from Massachusetts. Andy looked about the same and feels much better than when working "under the air" in the New York Harbor tunnels. In Lowell I saw Reg Foster, doing noble work for many young boys there as president of the Lowell Boys' Club. Our visit to the club house showed the splendid facilities he has given these boys from meagre and limited resources. The other Lowell twin, Chet Runels, had just returned from Pittsburgh where he saw C. T. Blackmore and Walt Africa. These were all happy pleasant visits — reminders of the closeness of our fine, old class friendships.

In Boston this summer Bridge Casselman phoned while visiting his son, Robert (M.I.T. 1939). Bill Mellema phoned upon his return from a two-months flying trip through Europe where he visited the old Mellema State in Holland, founded in 1567. Bill was born there but, of course, much later. Phoebe (E. E.) Proctor from Salisbury, N.C., visited Frank Scully at Frank's summer place in Marblehead, Mass. Weare and Kath Howlett joined them and they tried to round up some of the old 1915 class football team. — In preparation for the alumni dinner at the Boston Hotel Statler June 12, we had a class cocktail party there. Outstanding among the many classmates and their wives and families who attended were Ken and Ester Johnson who renewed old times with Bill and Mrs. McEwen. Ken and Bill were roommates so they had much unfinished business to discuss. It

was Ken's first appearance at a class party and we all look forward to seeing him again.

Early in August Barbara Thomas was in the Parkway Hospital, Brookline, Mass. The Class sent flowers and many of the Boston group wrote cards and notes — our tribute to Barbara for her long interest and devotion to 1915. You'll be glad to know she's feeling fine and back at work as secretary to the professor in charge of the Physics Department at M.I.T. Here's her sweet note to us: "I can't seem to find words sufficiently adequate to express my deep gratitude to you and the Class of '15 for the beautiful flowers and the many welcome messages received during my recent illness! It made me realize more than ever before how much we need comforting expressions of sympathy and reassurance from our friends. Thank you, one and all, Class of 1915!"

There are only a few class bachelors left. On June 30, at the Williston Congregational Church, Portland, Maine, Donald O. Hooper was married to Dorothea Billings. They will live at 185 Ashmont Street, Portland, Maine. Congratulations to Donald and his bride. — Following his retirement from business a few years ago, Alfred Hall has been at home in Saco, Maine. We hear from him all too infrequently. — Another class wedding with all the best from 1915 to Herb Anderson's son, Peter Barrett Robinson, who was married to Cynthia Fletcher on June 26 at St. Anne's Church, Lowell, Mass.

Upon his return to Akron, Ohio, Parry Keller wrote: "I thoroughly enjoyed my vacation in New England — particularly meeting the gang again and their ladies on Alumni Day. I am planning to be with you and the others next June. I have just finished reading the July Review and, as usual, it is an outstanding job. The 1915 Class Notes were in quantity and interesting. You continue to serve the Class over and above expectations in regard to The Review. I will try to be more helpful during the coming year."

From the New York Times Book Review, August 29: "Warning! Thousands are digging their graves with their knives and forks. Let this famous nutrition authority show you 'How to Eat Your Way to a Longer Life.'" This is Jim Tobey's latest literary achievement. Maybe some of us approaching the middle-age-spread stage could learn from Jim's thesis on how to live longer. — While in Boston this summer from Ithaca, N.Y., Harold Pickering phoned me. In Detroit, Frances and I had an afternoon visit with Herb Swift's brother, LeRoy, on his luxurious cruiser out of the Grosse Pointe Yacht Club. Herb had a tough break in not being elected for governor's council from his New London, N.H., district. Better luck next time to our aspiring politician.

More class honors: In June, Lorin G. Miller, authority on heating and ventilation engineering was appointed dean of the school of engineering at Michigan State College, East Lansing, Mich. At its annual convention in Salt Lake City on June 25, the American Institute of Architects conferred the title of Fellow on Philip Lindsley Small of the Cleveland chapter. Fellowship is conferred upon

members of the Institute who have notably contributed to the advancement of the profession of architecture in design, the science of construction, by literature, educational service, service to the Institute and its component organizations or by public service. Congratulations to Phil on receiving this signal honor. With his usual sense of humor, he wrote: "Unfortunately, I expect my boss to leave for a visit in Canada the end of this week. Do not expect to go with her, however, and will try to join you in Akron. Will call Parry Keller at Goodyear if I can arrange to be there. In case I do not show up, come up to Cleveland and call me at the office. The enclosed clipping shows that I'm now catalogued as an old man. From now on I'm probably not permitted to listen to stories of Lord D—, laugh at anything, play games, and also, I'll have to confine myself to one very sedate drink of Johnnie Walker with other oldsters at the Club. Or maybe I'll have to drink Lord Calvert! Worry not, Azel, they can't make an old man out of me just by pinning on a lily!"

On a letterhead showing the picture of a comfortable farm house and buildings, Boots Malone writes from retirement on his Sugar Bush Farm, Chester, Vt.: "I found your letter of Sunday upon my return to Chester from a week in a camp where I was trying to relearn to keep my seat on a horse. I had the whole family with me and we had an enjoyable and instructive week."

I don't know how many of our classmates have yachts but Bill Brackett, being serious for once, must have a fine boat. They have had a wonderful time with Charlie and Bee Norton. Several of us have visited Charlie at different times and we well know what a trip to his place on the island can offer. Aboard the *Sea Swallow*: "Would like you to know what a pleasant experience we all had with Charlie and Bee Norton on Marthas Vineyard last Saturday. May and I, with her sister and husband, were on a cruise to Newport, Block Island, Marthas Vineyard, Nantucket and back to Marion. We stopped in Vineyard Haven and I decided to get in touch with Charlie so we laid over there a day. He took us on a tour of the island and to his home which was built in 1836. It is a most delightful old house with all joiner work, doors, window sash, paneling and mouldings fashioned by hand by his own family. While there, we all had a drink of goat's milk. The first time for each of us. We also saw his famous sheepherding dog, a scotch collie, named Meg. I never knew one of our classmates had such a famous dog. She is very widely known among the real dog fanciers, and has certainly wound herself around Charlie's heart. She is getting on in years now and has to take commands by gestures instead of sounds. It is a revelation to see her go through the obedience tests. The afternoon ended with Charlie and Bee joining us under the cocktail flag on the *Sea Swallow*. In one way it is too bad that more of our classmates do not have a chance to look up Charlie. However, if they did, Charlie would go broke. He gave us his whole afternoon. He wouldn't have any time for

work. Our stop with him is one of the high lights of the summer."

New members of the Grandfathers Club are Reg Foster, Vince Maconi, Chet Runels (2), and Fred Waters, the latest, with Hilary Waters presented to Mr. and Mrs. James D. Waters on July 19. — Our foreign mail is heavy. Herb Anderson, who is vice-president of H. Brinton Company, Philadelphia, visited important textile centers of the continent and England. On a fascinating card from Luzerne, Herb wrote: "Flew over on a high pressure trip. Arrived in Paris a week ago. Drove through with friends to Zurich and off to Italy by air on Thursday. From then on by plane to Rome, the Levant, back to Denmark. Home by way of Sweden, Belgium, Holland and England. Too much to do in too short a period of time. If weather permits continuous flying will be back in States by way of Shannon, Ireland, early in October."

Raymond Gladding sent his class dues from Rio de Janeiro in a colorful envelope covered with attractive stamps. You will recall Frank Scully's European trip last fall (March 1948 Class Notes). Here are very interesting letters from Frank and Ken Boynton: "We returned to Paris the middle of February just in time to run into the worst weather of the winter. I developed a bad cold and as the temperature in my office for days was just above freezing, I had to work at home for a while. We kept several rooms in the house fairly warm by prodigally using coal with a confidence that winter was nearly over and that our short supply would hold out. It did. We arrived in New York two or three days before the big storm of December 26 and in spite of the inconveniences we got quite a kick out of it as we had seen so little snow during the many years that we lived in Mexico."

The letter that Frank sent to me was accompanied by his own letter: "As far as my own trip is concerned, I left on the *America* the latter part of October from New York and spent a week in London, a week in Paris, and a few days in Belgium, then returned to Paris before starting back to the States on Thanksgiving Day. My trip was primarily to investigate the market for our products and establish contacts with manufacturers whom we could license. I felt that two other aspects of the trip might be almost as important as the business. No one can go to Europe these days without being impressed with the good luck that we have to be citizens of the United States. I figured the trip would be 50 per cent business, 25 per cent pleasure and 25 per cent an opportunity to find out what it was all about. Certainly the more we know first hand about the problems of western Europe, the better it should be for international relations. I came back firmly impressed with the necessity of helping both France and England. No one can really analyze the economy of a country in the few days I had available, but without our help I am very fearful that western Europe would be without much hope. Restrictions are extensive, particularly concerning the use of petroleum and petroleum equipment. It seemed the best policy would be for me to forget any

hope of setting up manufacture there for some time. I admire the English people tremendously and their grit in facing the future. It's pretty drab there. For example, I gave away a fruit cake to an engineer in a rather responsible position. I received a letter from him stating that most of the ingredients in the fruit cake had never been seen by his children, and that his wife had forgotten the names of them. I strongly recommend that anyone who has friends in England send them food. As for France, I believe that we have done a poor propaganda job. I think the ordinary Frenchman believes that the money and help we give them is just the money we find on the streets or comes down from Heaven. There is altogether too much social security. Members of two responsible companies told me that for every dollar they paid in payroll, they had to put 43 cents away to cover pensions, sick leave, vacations, medical expense and the other governmental regulations — that is too much of a load on the economy of a country. Belgium seemed to be quite prosperous and busy, although since my return imports from the United States have been substantially decreased due to governmental regulations and their desire to keep their dollars."

It is very sad to record the passing of Richard E. Hefler who died suddenly in Elizabeth, N.J., on August 22. Dick had been in poor health for some time. He was a partner in the Hefler-Snyder Company, contractors of Plainfield, and is survived by his wife, Marion C. Hefler; a son, Richard E. Hefler, Jr.; and two daughters, Martha Hefler and Mrs. Robert Sofield of Charlottesville, Va.

From 161 York Street, New Haven, Conn., little Andy sent the above notice and wrote: "We are getting along better with the tunnel now and have about 900 feet total. I look for daylight sometime in November."

Arise, ye sons of 1915 and raise your checks on high. On September 1 we were \$429 behind last year's total. You 153 men who gave last year are all reading these notes, but only 107 have contributed thus far. Our class pride is at stake — send your check — up it a little from last year and you'll do a lot to "help Azel." — AZEL W. MACK, *Secretary*, 40 St. Paul Street, Brookline 46, Mass.

## • 1916 •

It is with extreme regret that we announce the passing of the following members of the Class: Alexander Martin, Jr., lieutenant commander, U.S.N., passed away on April 19. He had been with the eighth Naval District in New Orleans. John R. Bradley, major, U.S.A., of Spencerport, N.Y., died on May 3. Wallace Blanchard of Winchester, Mass., left us on July 19. He had been treasurer of the Stahleker Steel Corporation of Cambridge. We also regret to announce the death on July 25 of Miss Ann Page, daughter of Arvin and Mrs. Page of Winston-Salem, N.C., after a sudden and brief illness.

Response to our never-ending quest for news has been fairly encouraging during the summer, but we must admit it could have been considerably better. It is un-

fortunate that the rest of the Class does not have the appreciation of our efforts that Frank Darlington expresses in his latest note. After discussing his current lapse in the pursuit of sailfish, marlin, and tuna from his hardy vessel the *Marmion*, he goes on to say: "My bete-noir is letter-writing: but having the job of being associated in the production of the 35th year book of my class of 1914 at Princeton has aroused my sympathy for the loyal Class Secretaries who constantly, and surprisingly successfully, buck stonewall-like apathy of their classmates. So good luck to you." His description could not be more perfect. How about some of you disproving it?

Articles and clippings furnished us from varied sources provide a few fill-ins where letters fail. A photograph in the August issue of *Architectural Record* pictures Charlie Cellarius, Treasurer of the American Institute of Architects, chatting with friends at the 80th convention of the American Institute of Architects in Salt Lake City in June. The *New York Times* of June 1 tells us that Walter Binger, Vice-president of the City Investing Company has been appointed a consultant in the technical division, Office of Civil Defense Planning. Walter was on the National Technological Advisory Committee and the National Committee on Civilian Protection during the War. The *Baltimore Sun* of May 16 advises that Edward R. Hall has been promoted to vice-president and assistant general manager of the shops division of the Koppers Company, Inc. He had previously been vice-president and works manager of the division which operates the Bartlett Hayward plant in Baltimore. He joined the company immediately after graduation from the Institute. A clipping from the *United States Review* of June 26, plus a very interesting letter, gives us some news of Frank D. Ross. Frank is with the Factory Insurance Association in Hartford and has supervision of the regional office there. He writes that he is "still doing business at the old stand here in Hartford; go out to play golf week ends, but tournament golf is pretty much a thing of the past, because the 'old grey mare ain't what she used to be,' and 36 holes of golf a day is getting to be hard work instead of pleasure. I took a trip out to the Coast with the head of the house this year, and I can only wish that the Pilgrims had landed on the Pacific rather than the Atlantic Coast — if they had, I'm afraid New England might be a wilderness still."

Steve Berke writes about the Alumni Day activities. Apologizing for having delayed his writing, he excuses himself (and who wouldn't after this) by saying: "Just about the time I was set to write you a lengthy epistle a love-sick swain and his lady friend from the land of Evangeline crashed into me head on on the Worcester Turnpike and wrecked a perfectly good Buick to say nothing of a somewhat ancient model of a human body with a Technology '16 label. Very fortunately I got off with three broken ribs and a crack in the jaw and now I am well on the way to recovery. Alumni Day was well attended by a great majority of the classes, but not very well by '16. However, eight of the faithful turned up for the dinner at



the Hotel Statler. All of the boys looked pretty well for their advancing years, and one thing I must say for our Class, as I have seen them compared to their contemporaries, they are holding onto their youth (or age) in pretty good style." Those present at the dinner were Ping Loo, Hy Ullian, Rusty White, Duke Wellington, Joe Minevitch, George Maverick, Shatswell Ober and Steve Berke. Steve himself is busy with his own construction company, building bridges all over New England. You will find him at his office at 8 Newbury Street, Boston.

Jack Hickey writes an interesting note about his life since graduating from the Institute: "My biggest boast" he says, "is that I will be married 24 years this October and have a family of eight children ranging from the ages of 22 years down to eight. After leaving Technology I entered the wholesale meat business with my father and remained in that business until the beginning of the War. At that time the War Food Board selected me to take charge of the procurement of all meats for the Army, Navy and Marine Corps in the area from Washington, D.C., to Presque Isle, Maine, as well as handling the buying of meat for forces afloat. In December, 1946, I resigned from government service to open the Keystone Brokerage Company in Boston, which handles all kinds of meat and packing house products."

Ray Brown has the following to say about his post-Technology life: "After leaving the Army at the end of World War I, I started working in 1920 at the Niagara Falls branch of Comstock and Wescott, Inc., of Cambridge, research and development engineers, and I have been at it ever since. Our interests are mostly metallurgical. We develop processes for customers and for our own account. I am a sort of jack-of-all-trades, engineer, salesman, assistant treasurer, purchasing agent, and so forth. In 1918 I married Melva L. Cook, and we have three sons. They were in World War II, and all returned from the service for which we are humbly grateful. This noon I expect to have lunch with classmate Earl Hauman of Saint Catharine's, Ontario."

A newsy letter has been received from Maurice Holland of 40 West 40th Street, New York. "My work as adviser in research management and organization to industrial companies, typical at present: Pillsbury Mills, Inc., Minneapolis; Anheuser-Busch, Inc., St. Louis; Southwest Research Institute of San Antonio; and Pullman-Standard Car Manufacturing Company in Chicago. That means I travel 50,000 miles a year and for an 'ole guy' of 57 that's not hay! As far as I know that field of work is unique — I have no competition that I know of. I was one of 30-odd authors of *Research in Industry, its Organization and Management* published by Van Nostrand. The book was sponsored by the Industrial Research Institute of which I was founder in 1938 and now its first honorary Fellow." Maurice received the Silver Medal for "unusual contributions" from the Royal Academy of Engineering Sciences in Stockholm, Sweden, as leader of a mission to establish a bridgehead for flow of technology

across the Atlantic.

Speaking of honors and decorations, Charles H. Woolley, colonel, U.S.A., was awarded the Legion of Merit for his services during the War. If anyone has news of similar awards or presentations please forward them to either of the Class Secretaries.

We received a brief note from Ed Weissbach of Merchantville, N.J. He writes "I was out in Akron in June and stopped at Flipp Fleming's just to say howdy. Flipp told me that Johnny Ingle has retired from Goodyear and is now operating a ranch in Southern California." Joe Brodil, 3650 Larchwood Place, Riverside, Calif., keeps us well informed of his welfare. His latest letter reads: "At long last I've gotten moved though am not as yet entirely settled. It will take time, and though I am not in too good health, I have gloried in it all. Letters are always welcome. News from my old State are especially desirable. Though I procrastinate in answering letters, I eventually get around to this duty. You no doubt will hear from me in the not-too-distant future." That conclusion is what we like to hear. How about some of you '16 men around Los Angeles or Riverside calling on Joe.

George Tuttle, who is working on the Guided Missiles Program at the old stamping ground, M.I.T. herself, writes on a letterhead with a most mysterious sub-title which reads: "Project Meteor." He informs us: "We moved to New England when I went into war work in 1942. Then I came to M.I.T. Headquarters Office Project Meteor as facilities engineer. [What does that mean?] Our older daughter is married and living in Pembroke, N.H. The younger expects to go to Vermont Junior College this year. My avocation is basement mechanics, gadgets perhaps, antiques, 'fixing,' and developing mechanical devices." George invites us to visit him, which invitation we pass on to the Class: "If you come down to the Institute come in to see me, and if you are in Wellesley come and see us at 7 Denton Road, very near the square off Washington Street, just beyond the inn."

Fred Bryant, located with Bryant and Heffernan Inc., 80 Broad Street, New York, excuses his not having written sooner by saying: "We Yankees are a reticent lot and whether from modesty, taciturnity or just plain laziness are slow to rush into print with their doings." He goes on however: "Since the Army released me (not too reluctantly) at the end of 1945, I have been back in the shipping business, taking peoples' freight and pushing it overseas and doing the same thing in reverse for goods coming into this country from abroad. It is interesting. You keep in touch with international events and meet an assortment of persons, both foreign and domestic, all of whom have their own special problems which you can sometimes help them to solve. My wife and I live quietly in Bronxville with our two children. My daughter graduated from Smith College in 1946 which is why I did not get to the 30th reunion. I don't play golf or tennis any more but love to saw up trees for firewood and fool around with wood turning. I have made one trip

to Europe since 1935. My father is one of the few surviving members of the Institute's Class of 1883. I have never written a book."

Here is something really different from E. Blythe Stason, dean of the University of Michigan law school. While he indicates that there is nothing in his life worth reporting to his classmates, we think this is real news. He writes a very interesting letter which includes the following: "I am only a renegade. I am no longer an engineer. After my discharge in 1919 I studied law. After earning a law degree I practiced law. Then after a few years of practice I started to teach law. Finally, after 15 years of teaching law, I was drafted to serve as dean of the (Michigan) law school, and there I am today. I have long since forgotten all about differential equations, my knowledge of the temperature-entropy diagram is nil, and I cannot even operate a slide rule. I have no hobbies and there is not one earthly thing in my career that could elicit the least bit of interest in any Technology graduate."

We have a welcome note from Edward W. Macy who indicates that he has been and still is general director of the Brooklyn Children's Aid Society since 1931. He goes on to say: "During World War II I served as commander of Flotilla 1304 United States Coast Guard Auxiliary on anti-submarine patrol. Since November, 1947, I have been commander of Flotilla 1305 United States Coast Guard Auxiliary which operates air-radio-boat patrols Saturdays, Sundays and holidays in East Rockaway channel supplementing the shorthanded regular Coast Guard service."

A note from Larry Knowlton ends this month's receipts. As previously reported, he is with the Providence Gas Company and is rounding out his 29th year with the company. He finishes his letter by adding: "On the more personal side, I have a son who served as an ensign in the Navy on a tanker in the Pacific. He is married and has a small daughter. My daughter who was married about six years ago has two children, a boy and a girl."

And that's all for another month. The rest of you who read this column should find it just as easy to write as these contributors did. So get those letters in the mail. — RALPH A. FLETCHER, *Secretary*, Post Office Box 71, West Chelmsford, Mass. HAROLD F. DODGE, *Assistant Secretary*, Bell Telephone Laboratories, 463 West Street, New York 14, N.Y.

## • 1917 •

It may have taken a little long, but it was worth waiting for — *The Book* has at last been published, and to the committee goes a hearty vote of thanks. A high standard has been set should other classes decide to follow what has proven a most satisfactory step. Members of the committee point to Tom Meloy as the spark plug and the hardest worker. He in turn, being an honest man, admits that his secretary did most of the work. The committee had plenty of other demands on their time while they were planning and managing the production of this record of 1917.

Neal Tourtellotte has now bought out Don Bradley's ('18) interest in the Flooring Division of Tourtellotte-Bradley, Inc., and will continue to operate as Tourtellotte Corporation, 404 White Building, Seattle 1, Washington. — Among graduates of the Class of 1948, recipients of the degree of B.S. in Cambridge, was Robert Palmer Auty, son of Clarence Auty. At the graduation ceremonies Blanchard, Lobdell, McAdams, Whitman and others played an active part.

Jack Wood was among the college yachtsmen who formed New England's "Afterguard" last spring, which was noted by the Boston papers as "part of one of the most important yachting organizations to take shape in this country in recent years." — Ham Wood attended Ed Farrow's ('20) wedding in Rochester and boasted to Leon McGrady about achieving the status of grandfather. — The Alumni Banquet attendance included Beadle, Beaver, Bone, Ray Brooks, Dennen, Dickson, Hyde, Knight, Loo, Lunn, McNeill, O'Brien, Stevens, Tourtellotte, Wenzell, and Whitman. Sherry O'Brien told of his recent association with Thermal, Inc., at 4501 West Lake Street, Chicago. Dad Wenzell won the attendance pool.

Edward Rounds, captain, U.S.N., appeared in Cambridge on July 29. For some time he has been directing head of the Bureau of Aeronautics development laboratory maintained by the Bureau of Aeronautics at Johnstown near Philadelphia. Ed has three daughters, one still in school, one photographing thoroughbreds in Kentucky, and the other in Washington. He still flies his usual 100 hours or more each year and has changed less than most of the men who have not seen him for many moons. — Winthrop C., and Mrs. Swain have announced the engagement of their daughter, Caroline Benton Swain, to Joseph Frederic Clayton. — William A. Sullivan is now a rear admiral, U.S.N., retired.

Probably one of the most significant of the nation's housing developments is that in the Boston area sponsored and financed by the John Hancock Insurance Company. The project is managed and directed for the company by Lucius Tuttle Hill. — RAYMOND STEVENS, *Secretary*, 30 Memorial Drive, Cambridge 42, Mass. FREDERICK BERNARD, *Assistant Secretary*, 24 Federal Street, Boston, Massachusetts.

## • 1918 •

Fall is harvest time, and for those of us who have been out of college 30 years there is much to gather in. Our reunion at the Cliff Hotel in North Scituate had a Neanderthal atmosphere, for it was here we gathered a quarter century ago. The hotel has since changed management, which added somewhat to the aptness of the adjective just used. In attendance at either the luncheon or the Alumni Dinner were: Julie Avery, Eli Berman, Stuart Boyd, Ted Braaten, Tom Brosnahan, Lester Couner, George Eckwall, Yale Evelev, Tom Fogarty, Stan Franklin, Don Goss, Grenville Hancock, Jack Hanley, Jim Irwin, Sid Judson, Joe Kelley, Tom Kelly, John Kilduff, Rolf Knudson (from Norway), Nat Krass, Harry Levine, Ned

Longley, Rob Longley, Alexander Magoun, Ralph Mahoney, Ray Miller, Fred Philbrick, Jack Purves, Ed Rossman, Pete Sanger, Max Seltzer, Granville Smith, Carlton Tucker, Charlie Watt, Sumner Wiley, Bill Wills, and myself. Our Class President, Alex Magoun, sat, freshly starched, at the head table. Yale Evelev, Ned Longley, Alex Magoun, and I have been present at every reunion. The statistical part is not quite over with yet. Grandfathers present were Goss, Boyd, Evelev, Purves and Miller. Magoun claimed to be seven-ninths of a grandfather and has since made the claim good with a grandson.

Class dinner on June 11 was enlivened as each man reported on the passing of the years. "I'm still doing what I've always done. I've got three children," said one engineer who had no intention of flooding our eyes with laughter. Max Seltzer, not to be outdone by anyone named Blanding, gave a solemn account of how \$20 damage to his back fence finally cost him over \$3,000. Granville Smith spoke lightly of his participation in world-shaking events. As a colonel in the Army he sorted out 20,000 displaced persons, and had to get some work out of them during the process. He installed the electrical system by which the proceedings of the Nuremburg trials could be heard in different languages. He was personnel officer at the trials and got personal enough to poke Goring in the equator — anyway he said he did. He got an army plane, being an old World War I aviator, and flew over Nuremburg to have a look, but was promptly buzzed and grounded in a most business-like and emphatic way by our Air Force which feared some plot to release the prisoners. He said Goring had the poison hidden in the toilet as reported by the newspapers, and that Germany is a dead duck.

Our harvest also includes some planting for later. William C. Foster, former Under Secretary of Commerce, has followed his old chief, W. Averell Harriman, into the top level of the Economic Co-operation Administration. Our information is that Bill is liaison between Harriman and Paul Hoffman who heads the effort. Also, last we knew, Bill was in Europe to see that all the money coming out of your taxes for European recovery is being properly administered. Like Granville Smith, Bill was an air corps lieutenant in World War I. If you can go from Granville to Grenville without getting your corn crop mixed, Grenville Hancock went from the reunion to be elected to the board of directors of the Northeast Airlines, Inc. Just by way of keeping things all on the same farm, he was an air corps lieutenant in World War II.

During our reunion at North Scituate, Bill Wills invited all hands to visit his cottage on Jerusalem Road. It commanded a wide view of the ocean toward which the unfinished plumbing pointed a suggestive soil pipe with a dash of salt, but your Scribe was busy recording the text devoted to Royal Barry in the June, 1948, *Wesco Reporter* — a house organ for Westinghouse which declared, referring to Bill, that "top talent" had been used to "inject current thinking on contempo-

rary architecture" into the plans for each of the four Westinghouse-sponsored houses in the Hartford Community Home Show. Wendell Kayser lives in Frederick, Md., (shades of Barbara Fritchie). He is a civilian again, but still on the same job for the Chemical Warfare Service. His office is at Camp Detrick but his work takes him practically around the world. So far he has not had a peek under the Iron Curtain. If we don't watch out some of our boys will be looking over it soon.

Some crops mature slowly. Sam Chamberlain, the list of whose books already cover a full inch in the latest *Who's Who*, has another one out. This time the title is *Small House in the Sun; the Visage of Rural New England*. Alexander Magoun, still a slight fraction of an inch behind Sam in his *Who's Who* list, has just come out with a 355 page volume on love and marriage which he says has been worked on for 19 years. At this writing the first chapter is scheduled for condensation in the November *Reader's Digest*. Nineteen years is a long time, but 25 is almost a third longer. Edward Sidman was honored on May 5 at a dinner in celebration of his quarter century as executive director of Hecht House, Dorchester.

In the course of his quarter century of service, first as Hecht House director of boys work, later as director of activities and for the past four years as executive director, Sidman has harvested numerous honors in recognition of his pioneering accomplishments. He is chairman of the Greater Boston Community Council's Day Camp Committee; a member of the executive committee of the Boston chapter of the American Association of Social Work, and past president of the City Wide Boy Workers Conference. How are your crops doing? — GRETCHEN A. PALMER, *Secretary*, The Thomas School, The Wilton Road, Rowayton, Conn.

## • 1919 •

After our summer vacation we are all back on the job again and, of course, anxious to learn what happened to our classmates since the July news. The Malden, Mass., *News*, of April 21, announced that William F. Bennett, Jr., commander, U.S.N.R., of 45 Coolidge Road, Malden, had been appointed training officer on the staff of organized surface brigade 1-1, United States Naval Reserve. Commander Bennett served for two years as executive officer aboard the USS *Briareus* (AR-12) which operated in the South and Southwest Pacific. Commander Bennett holds the position of executive secretary of the Plumbing and Heating Wholesalers Association of New England. — The Boston *Globe* of July 16 announced that George U. Parks has joined the Boston Edison Company. Parks was general manager of the Montaup Electric Company for 24 years. — The Lawrence, Mass., *Tribune* of July 3 carried a note concerning L. A. Jackson, manager-engineer of the Little Rock, Ark., municipal water works.

We announce with sorrow the death from pneumonia of Kanesaburo Kurokawa, professor of electrical engineering at Waseda University, on May 1. — It was



also with great sorrow that we learned of the death of Thomas S. Derr from the Boston *Herald* of June 1. Tom was president of the American Steam Automobile Company of Newton, Mass., and a former instructor at the Institute. He died at his home, 260 Quinabequin Road, Waban, Mass., on May 31. His father, Louis Derr, was professor of applied optics and photography at M.I.T. Tom was an inventor and had three United States patents; a water level indicator for boilers, a gas or vapor burner, and an air vent for the water level indicator. Tom made a life job out of trying to make a steam-powered automobile. He felt that the internal combustion engine was inefficient and that steam automobiles should be used. Tom helped the Army develop an artificial fog in World War II.

William H. Bassett, Jr., has been honorably discharged from the Alabama Ordnance Works after a year there and is temporarily on consulting work in New York City. He left the service with the rank of lieutenant colonel. — Dean Webster dropped a line suggesting the dates June 12 or June 19 for our 30-year reunion and the location of Weekapaug, R.I. — Jacob S. Braverman, general manager and part owner of Empire Corrugated Container Corporation, Brooklyn, N.Y., has a son 20 years old and a daughter 17. They are both at college. He will definitely attend the 30-year reunion. — Wayland S. Bailey writes: "At present I am on the M.I.T. Faculty, mostly testing materials, some research, some consulting. What I've wanted to do all my life. Having a good time. Interesting research this summer on window cleaners' safety equipment. Think I've found some answers. Recently got rating of Registered Professional Engineer. May be some help in consulting. Son at Thayer Academy. Daughter at Radcliffe. Life is swell. Wish Russians would behave. Hope to attend 30th."

Thomas H. Bott, Jr., Beverly, Mass., states that he will certainly try to attend the 1919 reunion in 1948. Charlie Farist is with the Ball and Socket Manufacturing Company, West Cheshire, Conn. Your Secretary dropped in on him on the way to Lake Winnepesaukee in July and had a very fine visit with Charlie, his wife and daughter. His daughter is a student at Radcliffe. — EUGENE R. SMOLEY, *Secretary*, The Lummus Company, 420 Lexington Avenue, New York 17, N.Y. ALAN G. RICHARDS, *Assistant Secretary*, Dewey and Almy Chemical Company, 62 Whittemore Avenue, Cambridge 40, Mass.

## • 1920 •

At the Alumni Banquet last June, held too late to report in the July issue of *The Review*, the following classmates joined your Secretary and had an exceedingly enjoyable get-together: Badger, Perc Bugbee, Al Burke, Cochrane, DesMarais, Doane, Glassett, Hennessy, Lord, Nalle, Thresher, and Whitehead. I think you will agree that this was a representative group and distinguished for quality if not quantity. Our 30th is going to be upon us before we know it so let's all begin gathering around whenever the opportunity presents itself this coming season. We want

to have a 30th that is even better than the delayed 25th.

Ernie Whitehead, president and treasurer of E. Whitehead, Inc., recently celebrated the 50th year of his firm's existence. The firm, a prosperous contracting outfit in Worcester, was established by his father, and the third generation is represented by Ernie's son who graduated from Technology recently.

Pete Ash was thoughtful enough to send me an announcement of his granddaughter's arrival on June 2. Amanda Beach Ash may not go to M.I.T., but her grandfather will be nonetheless proud of her, I'm sure. Perc Bugbee also acquired a granddaughter not long ago but this is old stuff to him as he has a grandson nearly three years old. The rest of you grandpops have been exceedingly diffident about your status. How about some information? Don't tell me that Pete and Perc are the only ones!

Ed Farrow was married to Marjorie Backus, daughter of Mr. and Mrs. James M. Backus of Rochester, New York, on June 12.

Harold Smiddy has been appointed general manager of the chemical department of General Electric Company. His headquarters will be in Pittsfield. Before he joined the General Electric Company he was a partner in Booz, Allen and Hamilton, industrial manager consumers. He is well known in the utilities field, having served as director and head of the operating and sales departments of Ebasco Services, Inc. Earlier, he was an executive of Electric Bond and Share Company and operating manager of West Penn Power Company. He is a vice-president of the Society for the Advancement of Management.

Erwin Harsch of Morton C. Tuttle Company now makes his home in Belmont, Mass., at 65 Hammond Road. William K. Lloyd is with the Maryland Casualty Company in Baltimore. Art Atwater has left Texas and is now in Cleveland with Arthur G. McKee and Company. Francis Bunker is in Los Angeles, address 2347 Manning Avenue. Harold Etter is in San Francisco with the Air Reduction Sales Company. Dave Fiske is now living in Croton-on-Hudson, New York, having left New Rochelle. Walter W. Warner, colonel, U.S.A., is with the Ordnance Department at Rock Island Arsenal in Illinois. Lyman P. Whitten is now a major general and is located at Chevy Chase, Maryland. Fritz Boley is in New Castle, Pa. Paul Corbin has left Toledo and is in Verona, New Jersey. Bill Finlay is in Kirkwood, Missouri. Ray Perry has gone from New York to Chicago. His address is 1400 Lake Shore Drive. — HAROLD BUGBEE, *Secretary*, 7 Dartmouth Street, Winchester, Mass.

## • 1921 •

Greetings and a hearty welcome to both newer members and those of long standing in our monthly meetings of the clan. To our Class Agent, Lark Randall, public acclaim for his capable direction of last season's Alumni Fund, in which 94 per cent of our quota of contributors gave 101 per cent of our quota in amount, or something over \$18 per contributor. With

Warrie Norton heading the Alumni Fund Board as its chairman, Lark is out to set a new record in this ninth year of the Fund and, with your continued help, he will do it.

Twenty-seven members of the Class attended the various functions of last Alumni Day. The high spot was, as usual, our informal afternoon meeting of classmates and their wives at the Hotel Statler prior to the banquet. Bob Miller's ever popular photographic record of Class Day in 1921 through the reunions was shown with the latest additions, thanks to Chick Kurth's heroic efforts with projection. Saul Silverstein was the thoughtful host for the occasion. With us for the third successive year, Helier Rodriguez and his charming wife, Graciela, took a bow for coming the greatest distance and promised to make the trip from Havana again next year.

Among those present were: Larry Conant, Josh Crosby, Ed Delany, Chick Dube, Fritz Ferdinand, Harry Goodman, Paul Hanson, Roy Hersum, Vic Homberg, Dugie Jackson, Mel Jenney, Chick and Mrs. Kurth, Leo Mann, Bob and Mrs. Miller, Don Morse, Warrie and Mrs. Norton, Vic Phaneuf, Herb and Mrs. Reinhard, Helier and Mrs. Rodriguez, Ray and Mrs. St. Laurent, Bill Sherry, Saul and Mrs. Silverstein, Ed Steffian, Henry Stillman, Frank Whelan and your Secretary.

Edwin F. Delany received congratulations on his marriage to Kathryn N. Shea of Cambridge. Ed served three years as a major in intelligence with the Army Air Forces in the European theater, and received the Bronze Star. He is assistant district manager of Hedge and Mattheis Company, handling construction equipment. The Delany's live at 145 Gerry Road, Chestnut Hill 67, Mass.

Edmund G. Farrand sent his regrets that a bad cold prevented him from keeping his engagements at Alumni Day. Chick Kurth advises that John E. Buckley, Jr., joined Boston Edison Company as a rate engineer. For more than 20 years, John has been with the Massachusetts Department of Public Utilities as rate engineer and director of gas, electric and water utilities. Previously, he was affiliated with the Consolidated Edison Company of New York, Inc., and also engineered construction projects for the Charles H. Tenney Company.

Robert F. Miller has joined the Graflex Company as assistant factory manager, having closed his consulting engineering activities. The family has recently moved from Cleveland to Bob's old home town, where they are now living at 230 Titus Avenue, Rochester 5, N.Y. If our experience with a Graflex camera circa 1907 is any criterion, Bob really has a job cut out for him to make them any more rugged or precise.

The first member of the secretarial committee to report this month, Bob sent a long clipping announcing the appointment of Paul H. Rutherford as general manager, Delco Appliance Division of General Motors Corporation in Rochester, N.Y. Paul, who has been assistant general manager of Delco since 1947, started his General Motors career in the Dayton Engineering Laboratories, now known as

Delco, in 1926. He was made chief engineer in 1936 and plant manager in 1940. In 1942, he joined the General Motors personnel staff in Detroit to handle wage dispute cases before the National War Labor Board. Before going to Rochester, he was a special assistant to the vice-president in charge of the Dayton, Canadian and overseas household appliance groups.

Bill Loesch, northern Ohio newshawk, followed on Bob's note closely with the news that he has been elected president of the M.I.T. Association of Cleveland for the next two years and that more news would now be forthcoming. Bill hopes the brethren will turn out en masse for their November 16 meeting with Congresswoman Frances P. Bolton as guest speaker.

Speaking of Cleveland recalls Ray St. Laurent's story of a chance meeting with Joe Gartland last July at Giant's Neck, Ray's summer home just below New Haven's scenic curve at Niantic, Conn. It turned out that Joe was visiting his sister and brother-in-law, long-time summer residents whom the St. Laurent's knew but didn't connect with the National Carbon Company's research engineer. Joe's boy, Peter, who is 16, is considering entering Technology next year.

Ray sent a clipping announcing that Dr. Reginald H. Smithwick, professor of surgery at Boston University school of medicine, presided at one of the sessions of the British Medical Association last summer in Cambridge, England. Helier and Graciela Rodriguez visited with Ray and Helen before going back to Havana. Helier heads the San Agustin Sugar Corporation, operates the two largest movie theaters in Havana and has numerous other interests. He is president of the M.I.T. Club of Cuba and an honorary secretary of the Institute for the area.

Through the courtesy of Daniel G. Hulett '42, Secretary of the M.I.T. Club of the Kanawha Valley, Charleston, W.Va., we learn of the marriage of Nancy Bartram, daughter of Thomas W., and Mrs. Bartram of Nitro, W.Va., to Norman Beecher '44. Mrs. Beecher was graduated from Wellesley, where she was president of student government. Tom is a research chemist of the rubber service division, Monsanto Chemical Company in Nitro.

Harry P. Field, Vice-president and Commercial Manager of the Hawaiian Electric Company, Limited, of Honolulu, gave us a very pleasant surprise in July with a phone call from Pennsylvania Station, New York, during the few minutes the train paused on his journey from the Institute to his sister's home in Philadelphia. Harry sent his regards to all, with apologies that he could not arrange to be here on Alumni Day. He attended meetings of the Edison Electric Institute in Washington and Rotary in Chicago, for which he serves as district governor in Hawaii. Harry has been appointed honorary secretary of the Institute in Honolulu.

We missed seeing Bill Emery on his visit to New York from Holyoke, where he is assistant works manager of the Worthington Pump and Machine Corporation. Bill was most helpful in supplying early class pictures for our photographic record and we promise to return them when he

makes good on his plans to join us at Alumni Day and bring his collection of movies of our 25th reunion.

On behalf of their many friends, we express sincere sorrow to the families of four members of the Class who have left our ranks: J. Henri Bayle, II, was sales manager of the Farrell Manufacturing Company, Joliet, Ill. Dr. George Fordham, VII, had been medical director of the Koffner Coal Company, Powellton, W.Va. Thomas F. Hickey, II, was formerly with the Merrimac Chemical Company, Everett, Mass. Harry R. Swanson, X, was the president and founder of Petro-Chem Development Company, Inc., New York City.

Promotions have been announced for several of our classmates in the armed forces. Franklin O. Carroll, who directs the research and development program of the Air Materiel Command at Wright Field, has been made a major general. Alfred B. Quinton, Jr., formerly a commanding general, Ordnance Department, Aberdeen Proving Ground, has been named a major general in the office of the Chief of Ordnance in Washington. Robert A. Hill has been promoted to colonel and assigned to the department of research and training publication at the Engineer School, Fort Belvoir, Va.

Now write me your news. — CAROLE A. CLARKE, Secretary, International Standard Electric Corporation, 67 Broad Street, New York 4, N.Y.

## • 1922 •

By the time these notes are printed, all in the Class will undoubtedly know that Al Browning died on July 2 at the Henry Ford Hospital in Detroit in his 49th year. All your Secretary can add are a few sidelights which indicate that his death was very unexpected as he was apparently making a good but slow recovery. Warren Ferguson saw him early in June just before Alumni Day and, at that time, Al appeared in excellent spirits and seemingly on the mend. Then, too, your Secretary received a note from Mrs. Browning in which she said she had been visiting with Al only a few minutes before he died. Chuck Brokaw has written, "Al Browning's passing was certainly a blow to all of us who knew him best. Dorothy was through Denver recently on her way back to Detroit after burying Al in Ogden. Needless to say, it was a very sad occasion. I saw Al in the hospital in Detroit just 10 days before he passed on. He was in such good spirits and had apparently made such a promising recovery that we all felt he was well on his way back. However, Dorothy told me he had very little heart left and any one of the bumps in the road, as she called them, might prove his last. I guess it was another case of a man just burning himself out both during the war and during the reconstruction period, because he never relaxed while I was around him."

1922 was well represented at Alumni Day, June 12. As usual, Whit Ferguson had his corner room at the Hotel Statler to which we repaired both before and after dinner. The following were on hand: Parke Appel, Brownie Brown, Don Car-

penter, Yard Chittick, Art Craig, Larry Davis, Stew Dimmick, Gene Downing, Whit Ferguson, Warren Ferguson, Dewey Godard, Herb Ham, Oscar Horovitz, Everett Howe, Bill Mueser, Randy Myer, Sam Reynolds, Lefty Rosengard, Bill Russell, Ros Sherbrooke, John Vaupel, Heinie Wagner, Frank Wescott, Frank Wing.

At six o'clock tea in Whit's room we were honored with the temporary presence of Deans Baker, Pitre, Burchard '23 and Thresher '20, who forthwith were made honorary members of '22, at least for the rest of the day. A composite letter of encouragement was written to Al Browning and signed by all present including, in addition to the above: Al Glassett '20, Past President of the M.I.T. Club of New York, Jim Killian '26, Dr. Compton, George Dandrow, Executive Vice-president Lobdell '17 and, from the Class of 1921, Ray St. Laurent, Cac Clarke and Paul Hanson.

George Dandrow, while present at the luncheon in the DuPont Court, deserted us thereafter, perhaps because his later required presence at the head table as president-elect of the Alumni Association for the coming year was somewhat incompatible with the doings in the smoke-filled room. George did a masterful job in presenting to Dr. Compton the gift of the Alumni Association in the form of a master mold in gold from which the new Technology song records were produced.

Ed Ash has written, "I am no longer with the appliance division of F. L. Jacobs Company, but I am representing Jacobs on their industrial mobilization. At the same time, I have moved my office back where I used to be at 6535 Third Avenue and I am setting up to be an independent manufacturer's representative with Jacobs as one of my accounts." The following news release about Ed is of even more interest. "Detroit, Michigan, May 11. The American Ordnance Association has appointed Edward A. Ash of the F. L. Jacobs Co. as Chairman of the Rocket, Jato (jet assist take-off) Guided Missile Committee for the Army and Navy, it has been announced."

Crawford H. Greenewalt's picture was on the cover of the May 15 issue of *Business Week*. Frank H. Wing, of the Lawton-Wing Company, Plymouth and De Soto dealers of Boston, has been elected president of the Massachusetts State Automobile Dealers Association.

Ab Johnson was elected president of Warner Machine Products, Inc., Muncie, Ind., manufacturers of automobile water pumps and knee-action parts, on June 7, 1948, after being vice-president and general manager since 1933. For the past three years, Ab has been chairman of the board of commissioners, Indiana Department of Veterans Affairs, and president of the Joint Anderson-Muncie Board of Aviation Commissioners. His daughter, Joanne, finished her junior year at Wellesley last June.

The nominating committee of the Alumni Council for nominating departmental visiting committees, submitted at the May 24, 1948, meeting of the Council, the name of Paul Ryan for membership on the Course XV Visiting Committee, Business and Engineering Administration.



A picture appearing in the *Boston Globe* of June 19, showed Bill Russell beneficently presiding over the annual outing of the Boston Apartment House Owners Association, of which he is president.

Harry Diamond, chief of the electronics division of the National Bureau of Standards and one of the inventors of the proximity fuse, rated by scientists as "the Number Two secret weapon of the second World War," died of a heart attack at his home in Washington, June 21, at the age of 48. Harry had been a leader in many developments of world-wide importance. He invented, with the aid of colleagues, the instrument landing system. He took part in the first completely blind flight and landing of an aircraft. His system is now operating at many airports. He later had a major part in the development of the robot device which collects information from the upper atmosphere. In 1942 he formed a new division in the Department of Standards for Research for the development of electronic devices. This group developed the radar proximity fuse for bombs, rockets and mortar shells. Harry received his B.S. degree from Technology and his master's degree in electrical engineering from Lehigh University. He received the 1940 award for engineering achievement from the Washington Academy of Science and, in 1945, the Naval Ordnance Award for exceptional service, and the War Department certificate for outstanding service. He is survived by his widow, two daughters, two brothers and two sisters to whom we extend our sympathy.

In the re-organization that has recently taken place in the New York, New Haven and Hartford Railroad, the new board of directors includes Fred Blackall, President of the Taft-Peirce Manufacturing Company of Woonsocket, R.I.

C. Harold Whittum, Jr., son of Charles Harold Whittum of Wayne, Penn., is a sophomore at St. Lawrence University, Canton, N.Y. Will other classmates having sons or daughters at college let the Secretary know their present addresses so that they can be included in the notes. — C. YARDLEY CHITTICK, *Secretary*, 77 Franklin Street, Boston 10, Mass. WHITWORTH FERGUSON, *Assistant Secretary*, 333 Ellicott Street, Buffalo 3, N.Y.

## • 1923 •

The 25-year reunion was a great success and the program as outlined in the July Class Notes was followed. The 25-year speaker at Class Day, William L. Stewart, Jr., opened the reunion calendar of the Class. The next event was the appearance of the Class President and Class Secretary at graduation exercises. They were allowed to tag along in academic procession with the delegation of the 50-year class which is more impressive by sheer numbers and the accumulated dignity of another 25 years.

On Alumni Day, June 12, members of the Class began to gather at approximately 9:00 A.M. at the registration desk in the main lobby of Building 10. During the morning and afternoon they took part in the following scheduled events: the Symposium, "Logistics of Peace" at Walker

Memorial; inspection of new buildings being constructed — Hayden Memorial Library, the athletic cage and the new senior dormitory; visits to department headquarters and inspection of exhibits arranged in main corridors. A good many members of the Class visited the Alumni Pool and saw for the first time the Class of 1923 garden adjoining the pool. At the time your Secretary chose to take an inspection party to the building, Doc Smith, our vice-president, was giving the pool a workout.

The 1923 party at the Alumni Day luncheon, held outdoors in DuPont Court, was a large one. More than 200 were at the special tables for the 25-year class. Large badges with the numerals '23 were worn by the 148 members of the Class present. In addition, 52 wives attended and 11 members brought sons or daughters or both, totaling 15. Three others had guests, notable among whom was Pappy Shaw, Bob Shaw's father. Two of the lady members of the Class were on hand: Dorothy W. Weeks and Ida B. Webster.

More than 60 members of the Class and their ladies crowded the parlor at the Hotel Statler in Boston for a pre-Alumni Dinner cocktail party. This was the first event of the reunion plans which were made by the reunion committee.

There were 143 at the 25-year class tables at the Alumni Dinner. Ida B. Webster, the one lady member present, sat with the Class. Some 40 other ladies, wives of members of the Class, were accommodated at the ladies' dinner held in another room at the Statler concurrently with the Alumni Dinner. Class President Shaw and Class Day Speaker Stewart were seated at the Alumni Dinner head table. Scheduled events of the dinner program were presentations of gifts to the Institute by the 50-year and 25-year classes. President Shaw formally presented to Dr. Karl T. Compton the Class of 1923 gift in funds for general purposes of the Institute totaling over \$70,000. These included the proceeds of the endowment insurance plan adopted by the Class at graduation and additional gifts, \$10,000 of which had already been turned over to the Institute for the Alumni Pool garden in 1940.

The class reunion events, independent of those of Alumni Day, began Sunday, June 13, when the reunion party began to assemble shortly after lunch at the Griswold Hotel, New London, Conn. In all there were 106 members of the Class and 37 others, including wives, children and guests.

Hou Yu Hsu, from Shanghai, attended the class party at the Hotel Statler Saturday afternoon and other Alumni Day events. He unquestionably holds the record for the longest distance traveled to the reunion. To get to New London, honors probably go to Alan R. Allen for the most travel effort. One week before the New London party, Alan was in Teheran, and still had a business trip to complete somewhere in Arabia. This he did by airplane, jeep and camel, which got him back to New York the day before he was due in New London. Frederick A. Kinch, Jr., and his wife, Ruth, were on hand. By contrast, they were leaving the States shortly after the reunion for South Africa where Fred has a new position. Charles H.

Ducoté came from Paris and Harold R. Bjerke from Oslo. Bjerke remarked that, even during the occupation of Norway by the Germans, he did not give up hope that when the 25th anniversary of the Class came around he would be able to be on hand. And on hand he was, accompanied by his most attractive wife, two sons and daughter. The elder son is a student at the Institute.

Reunion events at New London included golf (low gross 89), a treasure hunt, bridge, tennis, swimming and sailing. The details of these events and others will be covered in a special report on the reunion which is in preparation and which may be in the mails about the time these notes appear. An unscheduled event, much enjoyed by some 30 persons who took advantage of it, was the inspection of a submarine at the United States Navy submarine base at New London. Alan Allen made the arrangements.

At the reunion banquet on Tuesday evening, a brief period was devoted to an irreducible minimum of class business. The banquet was the occasion to recognize two of our specially invited guests, the late Alumni Secretary, Charles E. Locke '96, and Alumni Executive Vice-president, Harold E. Lobdell '17. Horace S. Ford, Treasurer of the Institute and honorary member of the Class of 1923, was to have been our third guest, but he was confined to bed by a bad throat and a cough and could not get to the reunion party at all. Brief reports by the Class Secretary and by James E. Brackett as Class Agent of the Alumni Fund, plus the announcement of two committees were principal formalities of the banquet meeting.

In making my report as Secretary, there was a chance to thank the members of the Class for their responses to mailings and to thank the other class officers and members of the reunion committee for the work done on the reunion program. Regular readers of these notes are familiar with most of the details covered by the Secretary's report. It concerned the number of persons in the Class and the success of the 25-year class gift program. In addition I thanked the Class for their appreciation of my services as Secretary since 1930 which prompted the gift of a radio and golf equipment — thanks which I can now repeat for the larger audience of these notes with the comment that both items are much enjoyed.

Looking forward, Class President Bob Shaw announced a committee for a 50-year class gift as follows: Horatio Bond, chairman, John D. Cochrane, Jr., Walter Dietz, George A. Johnson, William L. Stewart, Jr., and Horace S. Ford. He also appointed a nominating committee to review the situation with respect to class officers on the theory that this should be done periodically. The nominating committee consists of Francis P. Squibb, chairman, C. V. Chamberlin, Charles M. Mapes, David W. Skinner and Lyman L. Tremaine.

This account of the 25th reunion is mostly for the permanent record in *The Review* and it has necessarily crowded out a number of personal items which will have to be held over until next month.

The separate reunion report will be, I hope, a suitable memento of the occasion to those who were on hand and of interest to those who were not. It will be printed on heavy glossy paper so that a number of photographs can be nicely reproduced, including the group photograph taken at New London. It will be possible in that report to identify those who returned for the reunion and in some detail indicate who attended the various events. Here is a list by Courses of those who appeared either at Cambridge on Alumni Day or at the reunion party at New London:

Course I: E. S. Averell and wife Leah, A. W. Davenport, Louis R. deLuzuriaga, wife Susan and son Eusebio (M.I.T. '49), S. R. Evans and wife Joanna, G. T. Gilman and wife Maryon, D. W. Height and wife Katherine, O. L. Hooper, Harry Kalker and wife, W. S. LaLonde, Jr., Arne Lier, B. A. McKittrick, J. C. Nowell, Jr. and wife Dorothy, Gerald Putnam, P. S. Rice, J. M. Robbins, E. C. Schatz, A. C. Stewart, A. M. Valentine and wife Anne, W. W. Zapolski. Course II: T. G. Adams, F. D. Ahern, R. DeR. Brouwer and wife, C. T. Burke, F. H. Dillon, S. E. Duran-Ballen, H. B. Golding, H. B. Gray and wife Dorothy, E. L. Greenblatt, F. K. Haven, H. L. Hayden, F. W. Herlihy, W. G. Hughes, G. A. Johnson, H. P. Kelley, H. B. Keppel, F. A. Kinch, Jr., and wife Ruth, F. F. Lange and wife Esther, W. S. Marder and wife Marjorie, R. M. Randolph, H. F. Russell, E. R. Schwarz, J. E. Silvasy, Royal Sterling and wife Mary, L. L. Tremaine, H. J. Verner, R. C. Wagner and wife Mildred, J. H. Zimmerman. Course III: S. I. Berger and wife Margaret, Charles Goldstein and wife Jennie, Harry Green and wife Ella, Benjamin P. Lane and wife Alice, S. B. Metcalfe and wife Nancy, William Wolfe and wife Margaret. Course IV: J. W. Beretta and wife Mary Austin, P. B. Brown, J. E. Burchard and wife Marjorie, C. V. Chamberlin, R. T. Colburn, J. A. Frank, E. N. Gelotte, J. A. Henderson, S. S. Setchell and wife Martha, L. J. Tracy, I. B. Webster. Course V: H. A. Barnby, H. A. Brunson and wife Virginia, P. J. Culhane, W. A. Gallup and wife Lucy. Course VI: Benjamin Albert, P. B. Alger, G. W. Bricker, Jr., M. K. Chandler, J. K. Clapp, H. F. Crotty, B. S. Falk and wife Jeanette, Joseph Fleischer, wife and sons Aaron and David, R. H. Henderson and wife Marjorie, H. Y. Hsu, C. J. Koch and wife Elma, C. E. Loud, C. M. Mapes, R. C. Robin and wife, T. E. Rounds, Jr., R. P. Shaw and father F. P. Shaw, P. C. Smith, D. E. Washburn, wife Eleanor and daughter Carol, E. W. Willis, wife Doris and daughter Betty, C. F. Woodbury.

Course VII: G. A. Fitzgerald and wife Regina, E. A. Griswold and wife Esther, B. E. Proctor and wife Miriam. Course VIII: A. R. Allen, W. P. Allis and wife Nancy, Walter Dietz and wife, T. M. Edison and wife Ann, W. B. Greenough, M. C. Magarian, wife Sara and daughters Margaret and Marion, B. E. Warren. Course IX: H. M. Chatto, J. A. Dow and wife Katherine, L. A. Metz. Course X: Clark Barrett, A. R. Belyea, J. D. Cochran, Jr., T. B. Drew, Edward Fox, A. P. Godbout, W. H. Harding, R. L. Hershey, F. F. Hobson, P. B. Holden, A. W. Hosig and wife Mary, D. M. Houston, David

Kaufman, C. S. Keevil and wife, B. A. Landry, H. A. Lockhart, S. P. MacDonald and wife Eugenia, A. S. Myers, H. C. Pearson and wife Alice, E. G. Schoeffel and wife Marjorie, D. L. Shanklin, F. P. Squibb, E. W. Thiele, P. H. Vivian, J. C. Walton. Course XI: F. O. A. Almquist, W. S. Wise. Course XIII: C. H. Chaisson, J. A. Pennypacker, C. P. Swaine, W. N. Webster. Course XIV: C. P. Clapp and wife Louise, H. L. Cobb, B. B. Drisko, C. H. Ducoté, N. H. Frank, D. B. Joy and son David, D. W. Skinner, R. H. Smith, wife Eleanor and daughter Nancy. Course XV: E. A. Adams, E. M. Barnes and wife Monica, H. R. Bjerke, wife Helene, daughter Dikken and son Fredrik, Horatio Bond and wife Dorothy, J. E. Brackett, R. O. Brink, R. D. Brown, R. C. Canby, wife Margaret and daughter, B. L. Chapin, wife Priscilla, daughter Andrea and son John, P. L. Coleman, Benjamin Cooper, L. K. Downing, H. S. Ferguson, A. R. Holden, W. T. Howland, R. J. Hull, A. L. Johnson, wife Elizabeth and daughter Joanne, E. E. Kattwinkel, Hall Kirkham, E. P. Knight, J. Y. Lund, E. H. Miller, J. J. Murphy, H. F. Pike, A. S. Redway, G. A. Rowen and wife Mary, G. H. Southard, 3d, O. N. Stewart, W. L. Stewart, Jr., wife Julia and daughter Margaret Ann, F. J. Travers, Preston Woodling and wife Dorothy. Unnumbered Courses: Col. A. B. Johnson and wife, D. W. Weeks. — HORATIO L. BOND, *Secretary*, National Fire Protection Association, 60 Batterymarch, Boston 10, Mass. HOWARD F. RUSSELL, *Assistant Secretary*, Improved Risk Mutuals, 60 John Street, New York 7, N.Y.

## • 1924 •

With Alumni Day, 1949, definitely scheduled for Saturday, June 11, plans for the 1924 reunion have moved into high gear, according to George Knight and Russ Ambach, who have been appointed by George Parker, general chairman, to handle reunion affairs. George Knight is in charge of reservations, recreation and transportation, while Russ is acting as treasurer. East Bay Lodge at Osterville is the place, and the Class will begin to gather there on Wednesday afternoon, June 8, and will leave Saturday morning to attend Alumni Day in Cambridge.

Russ sends the following list of those whose reservations were in on September 12, with more coming in regularly: Russ Ambach, Mike Amezaga, Cliff Bailey, Frank Barrett, Bump Brown, Nish Cornish, Bill Correale, Griff Crafts, Al Cummings, George Davis, Lou Ferre, Bob Foster, Al Franks, Duke Freeman, Bill Giddon, John Hennessy, John Henninger, Iron Man Hook, Max Ilfeld, Dick Jackson, Joff Joffe, Skipper Jones, Barney Kline, George Knight, Ray Lehrer, Duke Lindsay, Mac MacNaught, Shorty Manning, Joe Mares, Duke Marrs, Dent Massey, Ed Moll, George Parker, Charlie Phelps, Wink Quarles, Bob Reid, Charlie Riva, Al Roig, Frenchy Rousseau, Herb Stutman, Whit Whitaker, and Sam Zerkowsky. These 42 reservations, Russ says, come from Canada, Cuba, Puerto Rico, Mexico, Louisiana, New Mexico, Florida, and way stations, and it looks as though enough more

might be on the way to fill the capacity of the lodge. So if you're planning to come, send your reservation in soon to Russell W. Ambach, 18 Whiting Street, Providence, R.I.

Here's a list of those who sat with the Class at the alumni dinner in June: Ashdown, Atherton, Barrett, Black, Everett, Freeman, Henninger, Kane, Kendall, Lehrer, Marsh, Neitlich, Parker, Quarles, Robinson, and Schooler. Bill Rivers, who arrived that day from New Delhi, somehow was captured by the Class of 1925, but was going to have that corrected. Frank Shaw and George Knight also attended an earlier portion of Alumni Day.

Paul Cardinal, whose family additions were reported regularly in these columns for a number of years, wrote last spring to say that for the past three years the number appeared to have stabilized at eight — four boys and four girls — and that the eldest, Lorene, had graduated from Montclair High School and had also won a contest sponsored by the Sons of the American Revolution for the best essay on the Constitution of the United States; thus perhaps exhibiting some of the paternal talents which appeared in Lounger columns of The Tech before Paul became its editor-in-chief 25 years ago. Paul also says he will be at the reunion next June.

I haven't a late report from George Parker on the progress of the 25-year gift to the Institute, but his June report denoted a fine response to the letters which Cy Duevel had sent out, with every indication of breaking the \$100,000 mark this winter. Bill MacCallum, I understand, is also at work, even in Hollywood, on the assembling of movies of Class members and their families, of which many reels have been taken through the years by Si Simonds on his many trips around the world.

Do you remember the Beaver, the concrete one, which is supposed to have lain buried in the Charles River these 25 years, after being dropped by Bill Robinson and Jimmie Doolittle? There are rumors, which I can't confirm, that it has floated up and plans to attend the reunion. I would also like to know who has the cowbell which signaled the arrival of the Class at functions in various places — Walker Memorial, Hotel Statler, Station 16 on Boylston Street, the Copley Plaza lobby and so forth. If you have a cowbell or can get one, bring it to the reunion for old-times sake.

News items: Stan Fosgate has been elected vice-president of Keyes Company, Miami real estate organization. — Tom Coogan, Florida's leading home builder, was elected Mayor of Surfside. — Jimmie Doolittle is a member of the National Advisory Committee for Aeronautics. — Ed Jagger, general manager of the International Association of Fire Chiefs, attends New Orleans Convention of Southwestern Association, makes important address to delegates. Write and tell us about *yourself*. — FRANCIS A. BARRETT, *General Secretary*, 234 Washington Street, Providence, R.I. WILLIAM W. QUARLES, *Assistant Secretary*, McGraw-Hill Publishing Company, 330 West 42d Street, New York, N.Y.



Through newspaper clippings, correspondence, and a surprise visit or two, the Secretary has gathered quite a grist of '26 news during the summer. Two of our classmates have responded to the government's demand for trained experts; Leo Teplow, who has become deputy chief of the Economic Co-operation Administration's mission to Italy, and Evan Frank Wilson, who has become assistant director of the division of raw materials of the Atomic Energy Commission. Two other classmates who have figured in the press are Robert C. Dean, artillery commander of the 94th Infantry Reserve Division, who has been promoted to brigadier general in the Army of the United States, and Alfred H. Dolben, who has been elected a director of the United States Trust Company and also president of the Massachusetts Real Estate Association.

The New York *World-Telegram's* Plus and Minus columnist, William Bloeth, found an interesting subject in George Leness not long ago. Here is how he briefed it: "To the uninitiated, underwriting is a mystic art running sometimes to five decimal places. Judging by the qualification of one of the cult, it is about as good a definition as there is. Our subject is George Leness. He started with an A.B. from Harvard, plus a civil engineer's ticket from M.I.T. Then, while working up the Wall Street ladder, he doubled as a professor of the equally occult sciences of mathematics and calculus at City College. He still is seldom far from a slide-rule (for those decimals). The record also shows he was once a champ half-miler on the track, presumably of benefit when handling issues that fail to sell. Like the old saw, all this equipment isn't absolutely necessary but it helps. For Mr. Leness now heads the underwriting department of Merrill Lynch, etc., etc."

We were interested to read also that William M. Walworth has been named chief engineer of Reo Motors, Inc.; that Wilbur W. Criswell, Jr., has been appointed sales representative, with offices in New York City, for the American Wheelabrator and Equipment Corporation; and that Hugh C. Gilgan has been elected superintendent of the schools of Avon and Holbrook, Mass. Charles Tonry is now in El Segundo, Calif., with Harschaw Chemical Company, and J. Burgess Coleman is in Decatur, Ill., where he is chief engineer for Decatur Pump Company.

It was a profound shock to learn of the death of Mac Short of Glendale, Calif., on August 13. Regarded as one of the foremost aviation designers in the country, he was vice-president of Lockheed Aircraft Corporation at the time of his death and had been the first president of the Vega Airplane Company. He was the first president of the Society of Automotive Engineers to be elected from outside the automobile industry, was a fellow of the Institute of Aeronautical Sciences, and was a member of Beta Theta Pi. His widow, two daughters, and a son survive.

Visitors whom it has been the Secretary's pleasure to see during the past few months include Philip Mancini, public

service engineer with the Providence department of public works; Bill Lowell, chief engineer of the lighting fixture division of Sylvania Electric Products, Inc., Ipswich; and Colonel Ward Hamilton, director of the research laboratory of Ritter Dental Manufacturing Company, Inc., Rochester. Ward was in the Army for four years, part of the time island hopping in the Pacific. Later he was responsible for running the railroads in that part of Korea occupied by the United States.

Last June, more than 20 members of the Class came together for a class meeting prior to the Alumni Dinner and even a larger number attended the Alumni Dinner. Our President, Dave Shepard, was here from London, and the group at the class meeting included, in addition, Gates Burrows, Laurence Cumming, Donald Cunningham, Robert Dawes, Robert Dean, Anthony Gabrenas, Warren Hamblet, Richard Johnson, and Commander Clifton McFarland.

Also, Frank McKeon, Raymond Mancha, Ronald Martin, Stewart Perry, Marvin Pickett, Winslow Russell, George Warren Smith, Leon Task, Flint Taylor, Cedric Valentine, Earl Wheeler, and Abraham White.

One of the actions taken at the class meeting was to express appreciation to Eben Haskell for the fine work he is doing as chairman of our class endowment fund committee and to assure him of the hearty support of the group. — JAMES R. KILLIAN, JR., *General Secretary*, Room 3-208, M.I.T., Cambridge 39, Mass.

## • 1927 •

Although our 20th reunion took place more than a year ago, I have never seen any pictures of the event. So that all the snapshots and photographs of the event can be accumulated in one place, I am wondering if those of you who have such historic items would send copies to your Secretary at the address below.

We regret to report the death, on February 8, of Frank L. von Brecht, who was well known to many of the Class. Frank's home was in St. Louis. After graduation he went to Texas "to play nursemaid to a lot of grapefruit trees," to use his own phrase. Later he lived in Miami Beach, Fla., Pasadena, Monrovia, Sierra Madre and Bakersfield, Calif. He was last employed by the Aerojet Engineering Corporation in Azusa, Calif. We regret also to report the death of Reginald W. Bulkley, Secretary of the Southwestern Association of M.I.T., on April 27. Although he had been physically handicapped for a long time, he was actually ill for only a week or two. The immediate cause of his death was a heart attack. He was buried from his old home in Fairfield, N.J., and is survived by his widow and two sons, Peter and Jonathan. Bulkley had been secretary of the Kansas City club for many years and had rendered fine service in that office. He was a most loyal supporter of all alumni activities.

In the course of the summer, I had a phone call from Amund Enger who still lives in Oslo, Norway, but was in New York on a business trip. He represented his family's firm which manufactures small

arms and ammunition for sporting purposes. The M.I.T. Club of the Kanawha Valley has written us of the graduation of Miss Katherine Bugbee from the Northfield School for Girls, East Northfield, Mass. She is the daughter of Stuart J. Bugbee who is a cost engineer at the Du Pont plant in Belle, W.Va. We are certainly glad to have this information from the Kanawha Valley Club. James M. Jutte has been appointed controller of the National Clothing Company of Rochester, N.Y. As a result of this appointment Jim moved from Pleasantville to Rochester and reports that he has found a place to live in the latter city at 380 Landing Road South. — Lloyd R. MacAdam spent two months this summer near Portland, Maine, after completing a course at the Naval War College at Newport. The following is quoted from his communication: "The continuous unfavorable weather that we recently have had in this part of Maine has interfered somewhat with my plans for these two months. I have managed to plant a vegetable garden with the kids, without overdoing it, and I finally have completed the rigging of a small cat boat (my Naval War College training). At the end of this period I shall join the large group of nomads who haunt the real estate agencies in Washington, D.C., where I shall commence a presumably three-year tour of duty in the office of the Chief of Ordnance. It is all as simple as that, and not very exciting. You were joking, of course, when you referred to my past prolific writings. You probably did feel, however, that a Scotsman should respond to the challenge of a stamped, self-addressed envelope — which he did."

We are indebted to the Lawrence, Mass., *Eagle* for bringing us completely up to date on George J. Saliba in the following terms: "George J. Saliba, former Methuen resident, is president and chief engineer of the Presto Recording Corp. which operates plants in N.Y.C., Newark and Paramus, N.J. The company is engaged in the manufacture of recording equipment for radio broadcasting stations, recording studios, schools and colleges. Approximately 500 persons are employed and the company's products are sold in 30 countries throughout the world. Following his graduation he was employed by several concerns as a technical engineer and entered business for himself in 1932. He has been president and chief engineer of the Presto Recording Corp. since 1940. During the recent war the company was given the Army-Navy 'E' award for outstanding work in the production of war equipment. Mr. Saliba is a licensed professional engineer and is a member of the American Institute of Electrical Engineers, the Institute of Radio Engineers and National Society of Professional Engineers. He was married in N.Y.C. in 1931 to Katherine Mussawir and has two sons, Joseph R. and Robert G. Saliba."

Faithful readers of this column will recall that R. Moen Smith wrote from Iliou, N.Y., in 1945. Moe is now living at the Williams Club here in New York and covers the last three years for us as follows: "I moved to Kansas City, Mo., in the fall of 1945, taking up my headquarters at the Lake City Ordnance Plant in Inde-

pendence, Mo. I remained there through the entire War, serving in various engineering and managerial positions. For the last two years I was involved in co-ordinating the tooling activities of practically all the small arms plants from Salt Lake City, Utah, to the East Coast. At the end of the War I moved to Iliou, N.Y., to engage in a program of reconversion and modernization in the manufacture of sporting arms, which activity I carried on until February of this year. At that time I severed my connections with the Remington Arms Company and the Du Pont Company to make a new connection in the manufacturing or engineering field."

Word of a classmate in the Far East is recorded by the Dallas, Texas, *Times-Herald*: "Korea will be represented by one of its own people for the first time at a meeting next month of the Economic Commission for Asia and the Far East. Chung Soo Oh, director of commerce of the Korean interim government, said today he would sit as an observer at the commission's third meeting at Ootacamund, India, June 1 to 13. Chung Soo Oh will travel by way of the United States, leaving here May 25 by Northwest Airlines."—Mr. and Mrs. Alfred Brandt of Sandusky, Ohio, announce the engagement of their daughter, Margarethe Marie Doris Brandt, captain, Army Nurse Corps, to George Reginald Taminosian of Newton, Mass., son of the late Dr. and Mrs. Timotheus Taminosian of Boston. Capt. Brandt was graduated from the City Hospital School of Nursing, Cleveland, Ohio. She took part in the campaign for the liberation of the Philippines, and is now on duty with the occupation forces in Germany. Our best wishes to George and his bride.

Lenvik Ylvisaker, who has been assistant production manager of the Koppers Company in Pittsburgh, has been named assistant general manager of the Koppers Piston Ring Division in Baltimore. Ylvisaker joined the Koppers Company in 1942 and was formerly associated with the Dravo Corporation in Pittsburgh.

In recording Fermo Bianchi's resignation as commissioner of public works, the Natick, Mass., *Bulletin* praises him in the following terms: "His ability on one of Natick's most important committees has been recognized throughout the town and it was with regret that the town was forced to accept the resignation of an outstanding public official."

As a new year for The Review and for Class Notes begins, may I urge those of you who have not been heard from recently to communicate with the undersigned.—JOSEPH S. HARRIS, *General Secretary*, Shell Oil Company, Inc., 50 West 50th Street, New York 20, N.Y.

## • 1928 •

Jim Donovan has forwarded the names of all 91 members of the Class who attended the recent 20th reunion at the Wianno Club in Osterville, Mass. Before listing these names, however, we should like to give you the gist of that very successful week end. The attractive Wianno Club proved to be a very fine selection. The food and service were excellent and the location was the best the Class has

had for any of its three reunions. The 20th at Wianno, with an attendance of 91, established a new record. Eighty-one members of the Class attended the 10th reunion at Saybrook, Conn., and 54 members celebrated our 5th reunion at Toy Town Tavern, Winchester, Mass. The first big meeting occurred on Friday night, occasioned by the broadcast of the Louis-Walcott fight. The fight proved to be less interesting than expected, but that was no damper on our enthusiasm in greeting familiar faces once again. Incidentally, the reunions at intervals of five or 10 years certainly allow "Old Man Time" to change the arrangements of hair, teeth, stomachs, and so forth. This created a great deal of fun, however, and in most cases the persons present were reasonable facsimiles of the individuals we knew in 1928. Late Friday night there were numerous poker games which brought the fellows together at closer range. Saturday morning a very spirited softball game was quite hotly contested. Carl Bernhardt's team finally made a fast finish (with the help of a few friendly "fat" pitches from Bob Harris) and came through to take the game. O. B. Denison '11, class guest and umpire, proved to be equally stern with the two teams, which prompted much razzing from both sides. Casualties included several Charley horses, and badly sprained hands by Gil Ackerman and yours truly. The golfers in the Class put on a good exhibition Saturday afternoon, with Tom Larson the real sharpshooter as on past occasions. The Class had its big banquet on Saturday night with full attendance. With the help of 20th-reunion steins, M.I.T. crew hats, and the musical program arranged by O. B. Denison, with group singing led by Bob Harris, this meeting proved to be one of the best the Class has had. The highlight of the affair was Dennie's playing the five most popular songs in each of the years from 1923 through 1928.

The only official action taken by the Class was to elect Dennie an honorary member in recognition of his association with our Class at the Institute when he was secretary of the Alumni Association. The most fun at our get-together was the chance to sit down and talk with fellows one hadn't seen for years. These bull sessions were going on day and night for most of the three-day week end and probably more than anything else were responsible for that unanimous conviction that it was a grand reunion. The evening was closed with a showing of class movies taken by Bill Bendz at our fifth and 10th reunions which proved so popular. Bill had to show the films a second time to please his audience. Particular thanks go to the reunion chairman, Roland Earle, and his committee for an outstandingly well-handled meeting.

Those present were: G. J. Ackerman, Max Bearon, W. I. Bendz, M. C. Beren, G. A. Bernat, C. J. Bernhardt, W. D. Birch, S. A. Brown, H. C. Buntschuh, R. W. Carder, C. S. Carter, C. M. Case, J. A. Carvalho, J. W. Chamberlain, G. I. Chatfield, D. F. Collier, J. G. Collins, J. P. Connelly, R. E. Crawford, C. M. Day, A. S. Dempewolf, James Donovan, J. H. Draper, Jr., R. D. Earle, N. S.

Foster, G. E. Francis, Jr., Lazare Gelin, R. M. Harbeck, H. A. Harrington, H. D. Harrington, R. S. Harris, T. G. Harvey, A. B. Hettrick, W. E. Hildick, F. W. Horn, G. S. Hubbard, S. M. Humphrey, P. A. Johnson, R. T. Jope, R. J. Joyce, D. S. Kennedy, W. J. Kirk, M. H. Klegerman, E. H. Knight, J. M. Kolligian, H. N. La-Croix, Thorwald Larson, E. M. Lester, C. E. Lyons, Franklin McDermott, K. J. MacKenzie, Mieth Maeser, G. N. Mangurian, J. C. Melcher, George Muir, 2d, J. F. Mulvey, R. E. Murphy, W. J. Murphy, A. A. Nichols, F. A. O'Brien, David Olken, L. J. O'Malley, H. C. Paige, G. P. Palo, R. R. Peatfield, W. H. Phillips, T. B. Pierce, H. F. Porter, R. J. Proctor, A. J. Puschin, J. R. Rae, J. F. Reynnders, J. D. Riley, R. B. Rubin, J. B. Russell, Jr., Rene Simard, R. S. Slayter, W. J. Smith, John Stack, E. R. Stevens, D. McC. Sturznicke, F. C. Sweeney, J. E. Tully, J. E. Ure, H. R. Wengen, J. G. Willett, R. L. Wofford, D. B. Wood, Abraham Woolf, C. E. Worthen.

Ralph Jope reports a call from Doug Tooley who is a design engineer in process development for the Consolidated Vultee Company located in Fort Worth, Texas. His son is 16 years old and soon will be on his way to M.I.T. Doug reports that Alex Tsougas and Lou Miller are also with Consolidated on the West Coast. Jim Donovan sent me the following news which describes the communication he has had from one of our classmates in China. "Cho-Lan Yin of 17/622 Avenue Joffre, Shanghai 12, China, returned his questionnaire at a cost of \$20,000 (Chinese). He is married and has five children. Currently he is assistant manager of the American Engineering Corporation in Shanghai, and states that he would like to correspond with Course II classmates."—GEORGE I. CHATFIELD, *General Secretary*, 49 Eton Road, Larchmont, N.Y.

## • 1937 •

The start of the new season finds us eager and anxious but with our ammunition at an all-time low. Your Secretary came down with what may have been Q fever on Labor Day week end and the after effects are still here. Not ordinarily susceptible to hay fever, I can certainly hold up with the best of them now.

During the summer we chronicled a few events of interest such as: The birth of a daughter, Susan Clare, to Clare and Arthur M. York on July 18. With the twins, that makes a nice family, or are there more? A daughter, Louise, was born to Dot and Ed Hitchcock on June 11 at Charleston, W.Va. This is their second child. Ed was president of the local alumni association during the past year. Art Barry was married on June 5 to Miss Shirley Haight of Charleston, W.Va. On May 29, Peter deFlorez '38 was married to Mrs. Suzanne Humphries Ford at the Park Avenue Christian Church in New York. Best of luck, congratulations and much happiness to you all.—WINTHROP A. JOHNS, *General Secretary*, 34 Mali Drive, North Plainfield, N.J. WALTER T. BLAKE, *Assistant Secretary*, Research and Products Development, Pillsbury Mills, Inc., Minneapolis 2, Minn.



## • 1939 •

At the outset of our 10th year, off and on, of Class Notes, may we remind you all of our forthcoming reunion slated for the week end of Alumni Day, 1949. Please forward any suggestions or ideas to the Secretary as soon as possible.

Dave Morgan has spent most of the summer traveling in Europe and North Africa in connection with installation and consulting engineering work for the International Manufacturing and Equipment Company of New York. Dave is specializing in the introduction of modern mining methods in these locations. — Art Zeldin has moved to Baltimore, Md., to join the engineering staff organized there to do the necessary designing, drafting, and detailing for a large electrolytic refining plant to be built at Garfield, Utah, by the Kennecott Copper Corporation. After studying present installations at Baltimore, Art will probably move on to Garfield. We hope he has better luck with housing in Garfield than he has had so far.

August B. Hunnicke, recognizable in the newspaper clipping as Byron, is the new mechanical development engineer in the mechanical and physical research department of the Plymouth Cordage Company, Plymouth, Mass. Previously, he has been with Deering Milliken Research Trust and, during the War, with Sperry Gyroscope Company. — Our society notes include the marriage last May of Jean Whitney Raymond to Ed Usher in Upper Montclair, N.J. The couple will reside in Verona, N.J. The engagement of Ralph Hegner to Kathryn Stout, of Woodbury, N.J., was announced this summer. — STUART PAIGE, *General Secretary*, 701 Mill Plain Road, Fairfield, Conn.

## • 1940 •

If you read the Class Notes you know that I went on a fishing trip last June and that I promised you would hear more about it providing we had good luck, and we did. In fact we took home 58 bass and 16 other brands. Fair enough for four of us on a two-day float.

After my last cry for news I received a fine letter from Bruce Duffett, most of which follows: "After graduation I went with American Viscose Corporation in Parkesburg, W.Va., a delightful civic-minded little city located at the junction of the Ohio and Kanawha Rivers. Not having made any revolutionary contribution to the manufacture of rayon, I responded to the call of Uncle Sam in the summer of 1941 as a second lieutenant. At the first post in Portsmouth, N.H., I worked with Don Ross and Nat Sage. The Army subsequently sent me to Fort Monroe, Va.; Camp Hulen, Texas; Orlando Field, Fla.; Fort Bliss, Texas; and finally to Tocloban, Leyte, in the Philippines where we had a negro aviation engineer battalion. The main job was air strip maintenance but included others, such as operation of a rock quarry, asphalt plant, road maintenance, bridge construction, drainage problems, and so forth. Three months after V-J day I arrived back in the United States and was discharged as a major in the Engineer Corps. As a civilian I joined Bakelite Corporation in Bound

Brook, N.J. We lived in Plainfield, N.J. By this time my family had grown to include two little girls, Anne and Sally. My wife is the former Petra Lingle, whom some will remember at our junior and senior dances. We were married in January, 1942. While in Plainfield I heard from Charlie Freeman, who is located in Providence, R.I., and doing nicely in real estate.

"Bakelite Corporation treated me to a liberal education in the manufacture of both thermosetting and thermoplastic materials. A year and a half later I received the job of plant superintendent at a new plant under construction in Monterrey, Mexico. In August of '47 the family moved to Monterrey where we now earn our daily bread and are enjoying the experience thoroughly. We have a beautiful modern factory, Bakelite de Mexico, S.A., of about 30,000 square feet where we manufacture phenol-formaldehyde molding materials for Mexican molders. There are a multitude of problems which include operating in a foreign language, maintenance of machinery new to the country, and the training of uneducated, inexperienced operators. All of these add to the zest of living. Year by year more people from the States are coming to Mexico for vacations. Should any of our Class happen to visit Monterrey, it would please me immensely to see them. Perhaps we could offer some assistance as to where to go, what to see, and how to behave, although I am not so sure our advice on the latter point would be of any value."

Philip Clark Morgan, Jr., received a bachelor of science degree from Carnegie Institute of Technology in metallurgical engineering some time ago. At the University of Iowa commencement last June a master of science degree in mechanics and hydraulics was awarded to Selahattin Mehmet Engez. Richard M. Dunlap, instructor in mechanical engineering at Robert College, Istanbul, Turkey, has been named assistant professor of mechanical engineering at the University of Illinois. He received both bachelor and master degrees in mechanical engineering at Technology. During the War he was in charge of design and construction of radar equipment for the Research Construction Company of Cambridge, Mass. He and his wife, Anne, have announced the birth of a son, John Hallowell Dunlap. Philip Darling, nationally known housing expert, has joined the staff of the Housing Authority of Baltimore as director of research and planning. He received his master's degree, as a member of our Class, in city planning. He was in the Army for four years, during which time he served in the Pacific as company officer and, subsequently, company commander with the 533rd Engineer Boat and Shore Regiment. A former staff member at the time our Class graduated, Alexander W. Wundheiler, who has been supervisor of ordnance research in the United States Navy Department, Bureau of Ordnance, has been named research professor of mechanics at Illinois Institute of Technology. I. Wm. Ricciuti and M. Wayne Stoffle have announced the consolidation of their architectural practices under the name of Ricciuti, Stoffle and Associates, Architects,

with offices in the Queen and Crescent Building, New Orleans.

We have a number of marriages which have taken place since our last writing as follows: Linda Saliba to Edward N. Sabagh; Barbara Spinning to A. Jay Powers, Jr., who is now vice-president of the Powers Photo Engraving Company of New York; Barbara Ann Backman to Robert L. Millar; Julia Catherine Falvey to David Joseph Collins; Dorothy Susman to Joseph B. Kripke; Phyllis Arlene Kaplan to George M. Wolfe; Norma Katherine Lamons to Alvin Gutttag.

Your Secretary was recently presented with his second daughter, Janet Margaret Wright. — H. GARRETT WRIGHT, *General Secretary*, Garrett Construction Company, Post Office Box 629, 510 Sherman Avenue, Springfield, Mo. THOMAS F. CREAMER, *Assistant Secretary*, 6 Berkley Road, Scarsdale, N.Y.

## • 1943 •

Before I turn to the accumulation of news from the 5th reunion in Cambridge in June and the mail since then, let me call your attention to my change of address. As many of you know already I completed my doctorate work at the Institute this summer and am now the assistant to the director of finance of the Champion Paper and Fibre Company. Actually, writing about my new address is just to remind you to keep the news rolling in.

The former Florence Muhs Smith and Bill Franklin were married in Ridgewood, N.J., on March 28. John Hess was an usher at the wedding. The couple spent their honeymoon in Bermuda and will reside in Brooklyn where Bill is with the David Smith Steel Company. A few weeks later, on April 3, the wedding of Wilma Marie Roser and Ray Mork took place in Cincinnati, Ohio. Ray is doing graduate work at the University of Cincinnati, the alma mater of his bride. Mort Schultz and the former Irene Zimmerman were married at the Savoy Plaza Hotel in New York on July 4. In Waban, Mass., Louise F. Greene became Mrs. Eugene R. Davis on June 5. The couple spent their wedding trip in Maine and returned to Washington, D.C. Another June bride was the former Barbara John Caseley of Wollaston, Mass.; she and Alvin C. Brodie were married on June 16. Al is studying for his master's degree at the Institute. James O. McDonough and the former Rosamond Poole were married in Trinity Church, Concord, Mass., on June 25. Ken Warden was Jim's best man. Since the War, the groom has been working in the Servomechanisms Laboratory at Technology. The Washington Street Church in Lynn, Mass., was the scene of the wedding of Virginia Frances Doyle and Bill Thurston on July 19. This couple will make their home in Cambridge where Bill is working toward his Master's degree and is also with the development engineering staff of the General Radio Corporation. The last day of July was the wedding day of Lydia Atherton Robinson and Charles Chubb. This couple were married in Queens, N.Y., and after their wedding trip made their home in Great Neck, L.I. Charlie is with the Sperry Gyroscope Company.

Jeanne Stockbarger was married to Ken Wadleigh on September 10. Jeanne is a graduate of the Boston University school of education and Bradford Junior College. Ken is currently on the staff of the Mechanical Engineering Department at the Institute and also working toward his doctorate. The parents of Joan Lorna Fleischer have announced her engagement to Bernard Reckseit. The future bride is a graduate of Vassar and Bernard is now associated in business in Cincinnati. From Buffalo, I hear that Ruth deChantal Schlau and Thomas A. Mitchell are engaged, and that an early fall wedding is planned. The parents of Mary Jacqueline Willis of Chicago have announced her engagement to Walter Hildebrand. The future bride is a graduate of Northwestern University.

Eduard Bullerjahn is to be congratulated upon winning the Swedish King's medal which is the highest Swedish award for architectural achievement. Eduard, who has just completed two years of study at the Royal Swedish Academy of Fine Arts and Architecture has returned to Boston to join a firm there. His prize-winning designs were embodied in a block of apartments for a New York site. His plans are revolutionary because the proposed construction is such that the inside of the building can be changed at any time. According to the scheme, a tenant would rent empty space in the building and have rooms built according to his own specifications. Eduard Bullerjahn's award is notable also because this is the first time it has been received by a foreigner.

Recep Safoglu is back in Turkey and apparently doing his military service in the Tank Corps. John Sprague tells us that he graduated from Harvard Business School a year ago and is now with the Monsanto Chemical Company in Everett, Mass. He adds, incidentally, that he is still single. Hans Haac is now at Du Pont's Granelli plant in New Jersey where his outfit is doing time study and job evaluation work. He says he runs into Dave McKay once in a while. Dave is with General Aniline also in New Jersey. Burt Angell is with the Baldwin Locomotive Works in Philadelphia. Al Bakker, who married Jacquie Bland from Portsmouth, Va., in June 1946, is working in the industrial engineering department of the Eastman Kodak Company at Rochester. Gustavo Calleja has his own rice sugar business. Carl Carlson describes himself as still blissfully single and glad to be back in Boston after four years with Gibbs and Cox in New York. He is now a hydraulics engineer for the Associated Factory Mutual Fire Insurance Company in Boston. Frank Dibble is doing design work in 16 millimeter motion-picture projectors with the General Precision Laboratory, Inc., in Pleasantville, N.Y. Ed Ernst is an electronics engineer in the Boston Naval Shipyard. George Feick tells us that he left Arthur D. Little, Inc., in Cambridge last December and is now in Lorain, Ohio with the Brush Beryllium Company. He is engaged to Jane Corlett whose home is in Hudson, Ohio. They expect to be married in October.

Dick Feingold, who did a fine job designing the fifth reunion notice, is with

Jackson and Moreland in Boston. He is occupied with research and development of bottling and packaging equipment, and also studying law at Boston University. George Freedman also is in the Boston area. He is with the Raytheon Manufacturing Company in Newton. Warren Fuchs who was at Oak Ridge from 1944 to 1947 is now pilot plant superintendent at the Chemical Construction Corporation in Linden, N.J. Ray Hahn, who has been with Carbide and Carbon Chemical Corporation since graduation, has moved from South Charleston, W.Va., to Oak Ridge, to Tonawanda, N.Y., then back to West Virginia and is now in New York as technical assistant to the works manager. After all that he confides that he is still foot loose! Bob Lichten tells us that he has a charming wife, a rugged two-year-old boy, a 1933 V8 and a helicopter engineering job with Bell Aircraft. Jackson and Moreland claim another of the group; namely, Bill Place, who is working on a Navy research project for them. Ned Swanberg, now with Scudder Stevens and Clark in Boston, says he has a wife and two children, a boy and girl. Herb Twaddle is at the Harvard Business School and conveys greetings from the Frank Smith's who are in Syracuse, N.Y., where Frank is working for General Electric Company at Electronics Park. John Ward is now in the Servomechanisms Laboratory at the Institute and expects to be there for some time. — CLINTON C. KEMP, *General Secretary*, 29 Verlynn Avenue, Hamilton, Ohio.

#### • 1944 (2-44) •

Your traveling Secretary is once more back on the business school campus and ready for another year of Class Notes. How about letting me in on what you all have been doing these past few months? Weddings as usual continue to be the important items of the day. Lew Tyree has a dependent now as he married Dorothy Hinchcliff of Chicago. She is a graduate of Pine Manor Junior College and Lew met her when he was at the Institute. Lew is still working for the Joy Manufacturing Company of Michigan City, Ind., and that is where they will probably make their home. They were married August 25 in Chicago. Sylvia Berg has married Henry Ivey of Newark, a Ph.D. graduate from Technology. He is employed by Westinghouse Electric Corp. of Bloomfield, N.Y. The couple will make their home in New York City. John Flanigan married Carlotta Busch in St. Louis Cathedral. They are spending a three-month honeymoon in Europe. She is a graduate of the Shipley School and her father is president of the Anheuser-Busch Corporation. Kimball Jencks of Montclair, N.J., married Alice Durant at Salt Lake City. Kimball did underwater demolition work in the Pacific and was released as a junior grade lieutenant from the Navy. Leroy Strasburger has married Edith Donaldson at Mount Holyoke, Mass. LeRoy is a graduate of Technology and the Columbia University school of business. He is now in the marketing division of the General Electric Company. Alan Rose married Elizabeth Zentgraf in Montclair, N.J. He is with the

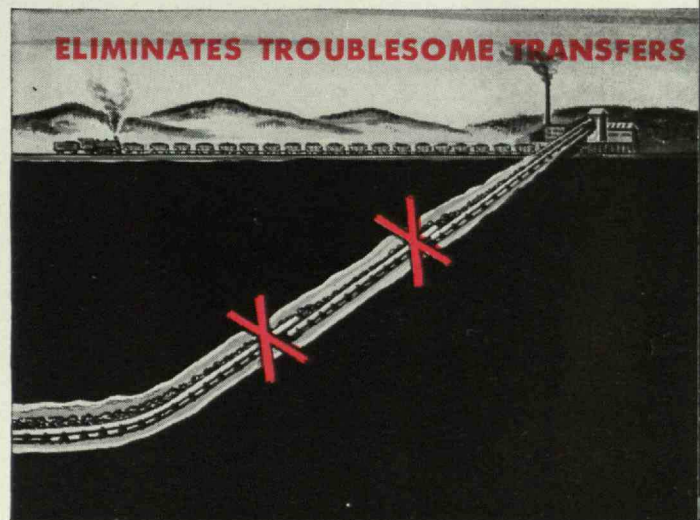
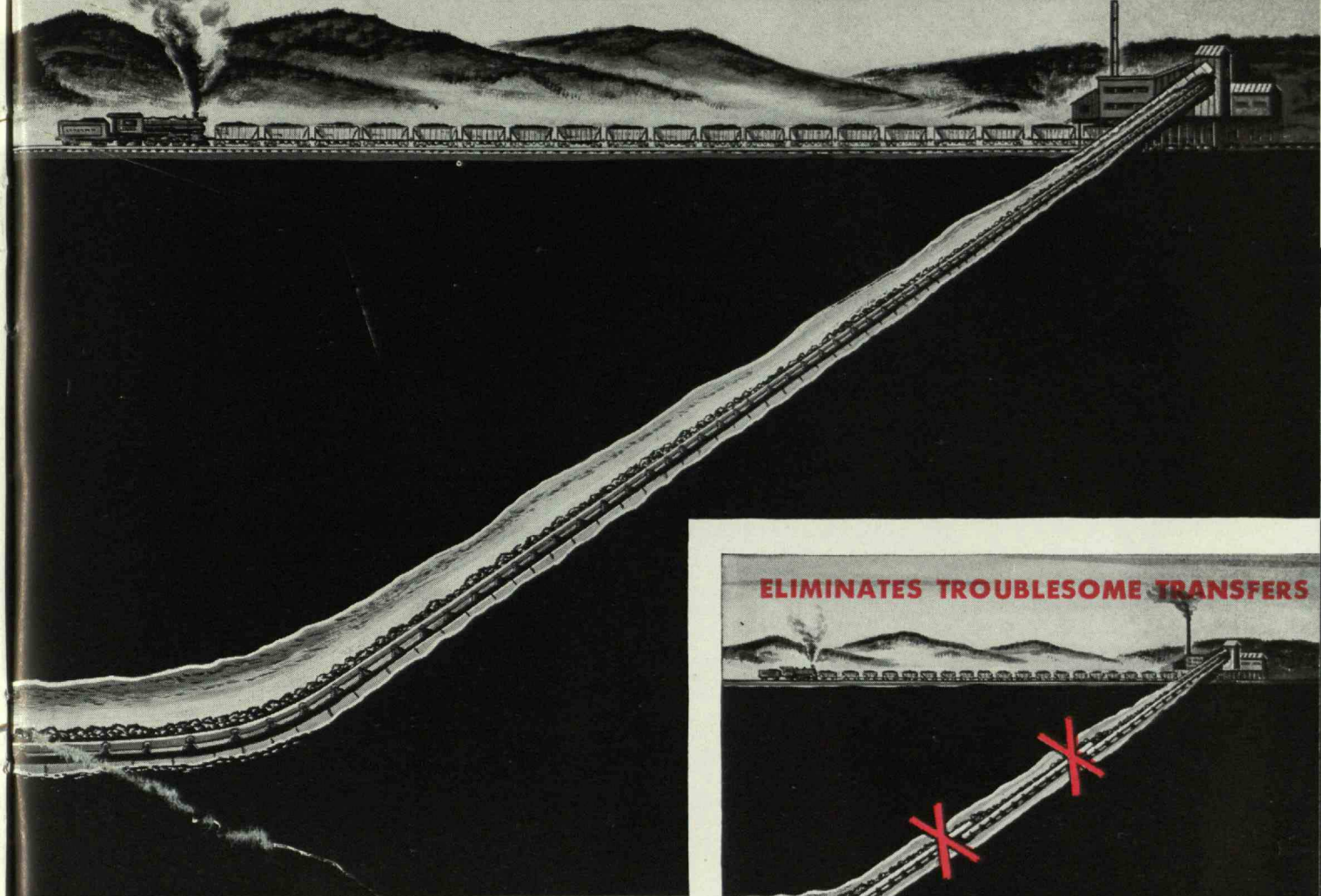
Cross Manufacturing Company of Detroit. Claude Corty married Susanne Pisko of Brookline in June. He is now doing graduate work at the University of Michigan. They will live in Ann Arbor. Bob Breck married Priscilla Buttner of Plymouth, Mass., in June. Bob Plachta was best man and the ushers were Bill Ritchie, Courtney Reeves '47 and Bill Bommer '49. They will make their home in Boston where Bob is working in the industrial engineering section of Filenes department store. Bob Barnaby is engaged to Jane Inglis of East Orange, N.J. She is a graduate of the Berkeley Secretarial School. John Burdakin is engaged to Jean C. Moulton of Milton, Mass. She is a graduate of Radcliffe College. Gerald Cauvin married Janine Merveilloux du Vignaux in August in New York City. John Reilly is now located in Spokane, Wash., and is on a four-month training program in sales management with the Kaiser Company. A report from the Stanolind Oil and Gas Company at Tulsa, Okla., says that they have recently hired Bob Maher for their manufacturing department in the general office at Tulsa. Raymond Jerome formerly in the metallurgical department of the American Manganese Steel division of the American Brake Shoe Company has gone to Providence, R.I., as engineering assistant in the metallurgical department of the Grinnell Corporation manufacturers of industrial piping. Bob Faurot is now in Akron with Goodyear. — WILLIAM B. SCOTT, *General Secretary*, Mellon c-41, Harvard Business School, Boston 63, Mass. MALCOLM KISPERT, *Assistant Secretary*, Room 3-245 M.I.T., Cambridge, Mass.

#### • 1948 •

Margaret Regan of Newton Center and Northeastern University became the bride of Tom Scanlan early in July. Heidi Clarke, a June graduate of Mount Holyoke, was wedded to Fred Richards, who is now doing graduate work in physical chemistry at Harvard Medical School. Margaret Parish of Raleigh, N.C., was married to Newton Cluff Garland, an old Lambda Chi who is now working for Raymond Engineering in Middletown, Conn. Beverly King, a graduate of Lasell Junior College (and the M.I.T. Nautical Association), was married on June 5 to Phil Bridges. Best man was Mal Dick '49, and familiar names among the ushers included Dan Greenbaum '49 and Clark DuBois. The couple plan to make their home in New Jersey. Olive Brown was wedded to Bob Oliver, who is continuing his studies at Cal Tech. Natalie Snow was married to Jerome Keuper; Julia Beaulieu to John Harrison; Ann Paquin to Paul Anderson; Nancy Seymour to George Wood; Marie DeGruttola to Roy Crask; Elizabeth Bredemeier to Robert Tesoro; Isabella Hynes to Robert Manz; and Nancy Lee Jones to Charles Beard. I am sorry I cannot give you more information concerning these last few weddings, but brief announcements were all I received. — WILLIAM R. ZIMMERMAN, *General Secretary*, M.I.T. Graduate House, Cambridge 39, Mass. [Additional 1948 Notes will appear in the December issue. — Ed.]



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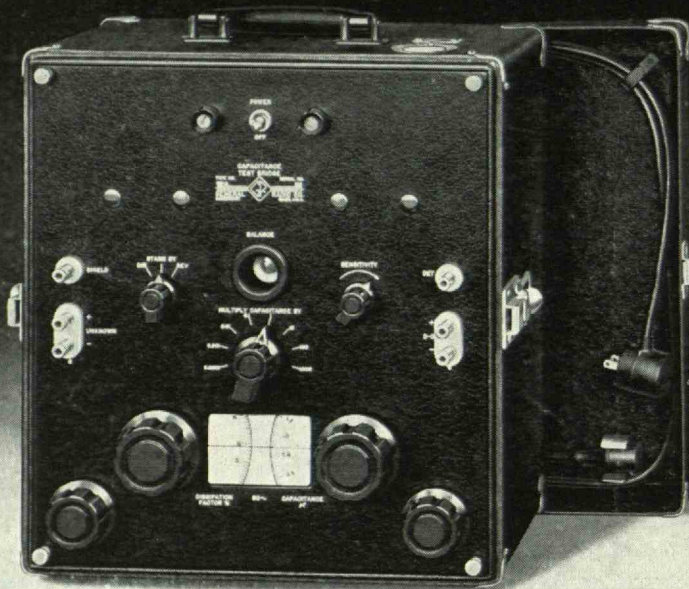
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